



Stormwater Projects / Program Report

Tampa City Council Update

No. 8 - October 18, 2018

A) Major Capital Improvements

Projects 1-5 regional multi-year flooding relief projects for the City of Tampa. Each project fact sheet includes a description, location map, and timeline status. Each of these projects is in various stages of development and will continue for a number of years, due to the complexity and comprehensive nature of the project. Project 6 incorporates the Miscellaneous Neighborhood Projects that typically have a six (6) months or less construction timeline and each have their own fact sheet.

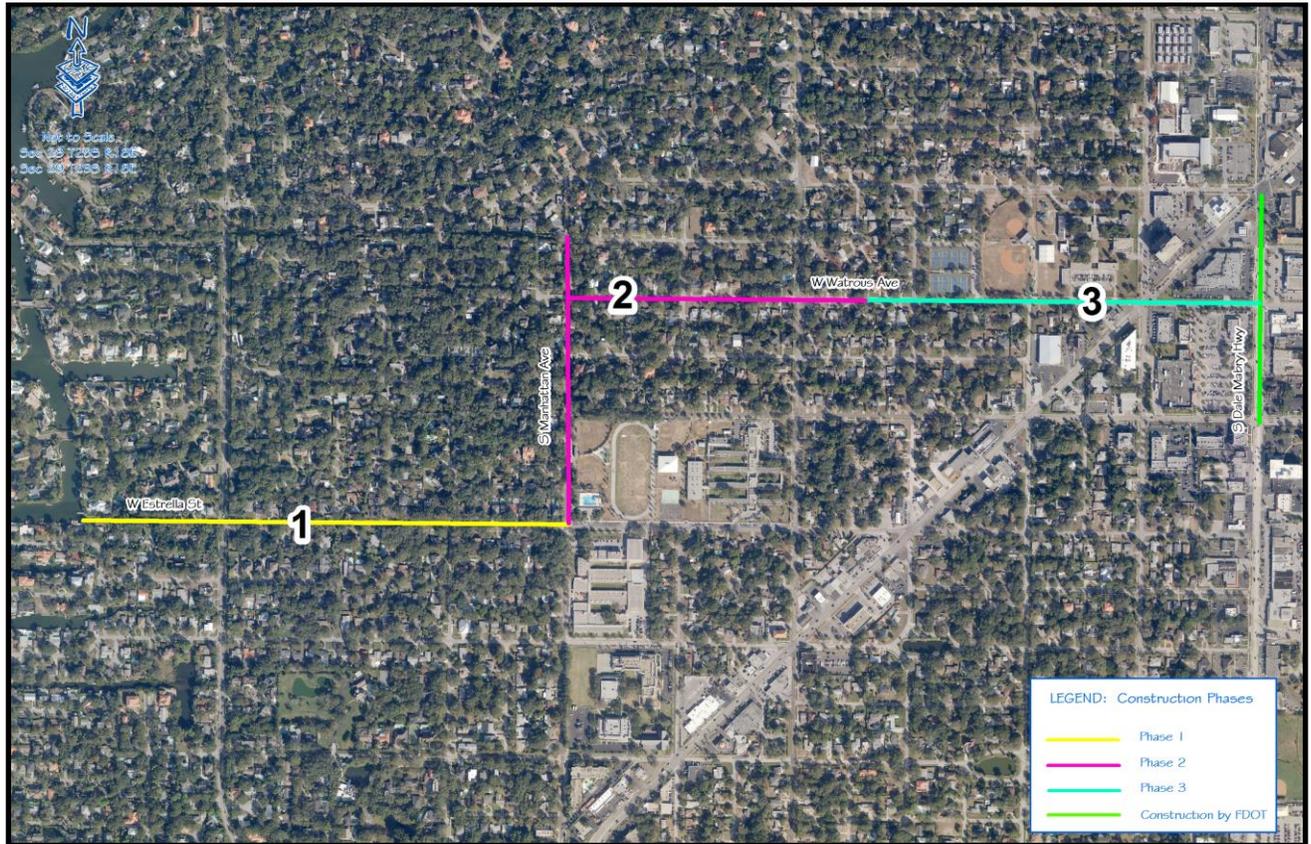
Project List CIP = \$251,285,000

1. Upper Peninsula Flooding Relief
2. North Tampa Closed Basin Flooding
3. Cypress Street Outfall Extension
4. Southeast Seminole Heights Flooding Relief
5. Lower Peninsula Flooding Relief
6. Miscellaneous Capital Improvements

B) Stormwater Capital Improvement Bond Program Report

C) Stormwater Service Assessment Program \$14,000,000

Dale Mabry Trunkline Project Phases



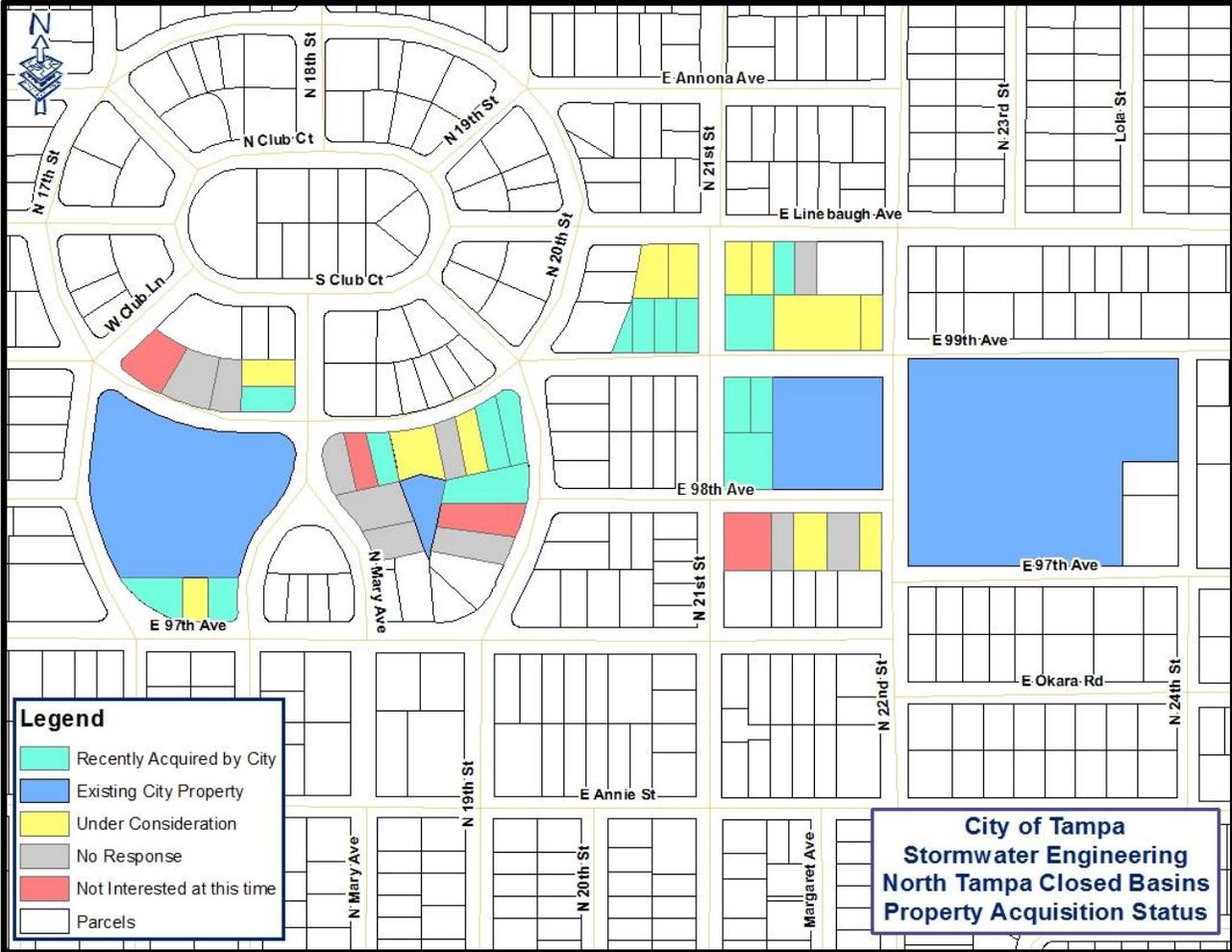
Summary of Project Costs:

Phase	Firm	Amount	Funding Source	Schedule	
				Start	Finish
Design/Build	Kimmins	\$37M	COT/SWFWMD	FY17	FY20

Timeline:

- Construction started June 25, 2018, and the projected completion is January 2021.
- 50% reimbursement by SWFWMD is occurring concurrently with construction.

Property Acquisition Map:



Summary of Project Costs:

Phase	Firm	Amount	Funding Source	Schedule	
				Start	Finish
Property Acquisition	In-House	\$1M/ Year	COT	FY16	FY20
Construction	In-House	\$2M	COT	FY20	FY21

Timeline:

- The City of Tampa Real Estate Division is in the process of acquiring the properties as identified by Transportation and Stormwater Services Department’s North Tampa Closed Basin Study. Please see the property acquisition map above.
- The Real Estate Division is currently working with multiple potential sellers.
- Property acquisition to be completed in FY20.
- Construction in FY20-FY21 with In-House Construction Crew. See project map above.



4. Southeast Seminole Heights Flooding Relief

City Project #: TBD

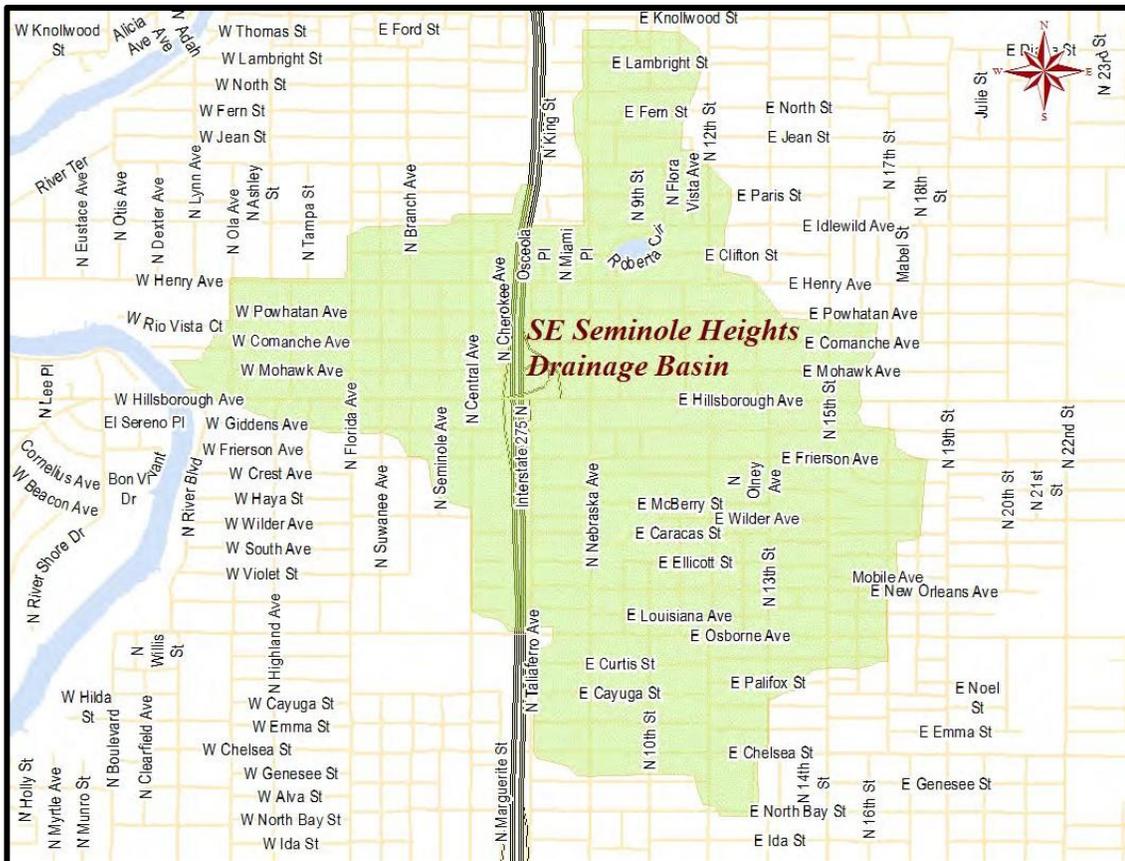
Project Description:

The Southeast Seminole Heights Drainage Basin encompasses 779 acres of urban area that discharges into the Hillsborough River south of the dam. The basin area extends northerly from E Chelsea Street east of I-275 freeway to E Diana Street and easterly to N 18th Street. To the west of I-275, the basin narrows and extends from Giddens Avenue to E North Street. The Basin is part of a historic Tampa neighborhood that had its beginnings in the early 1900's.

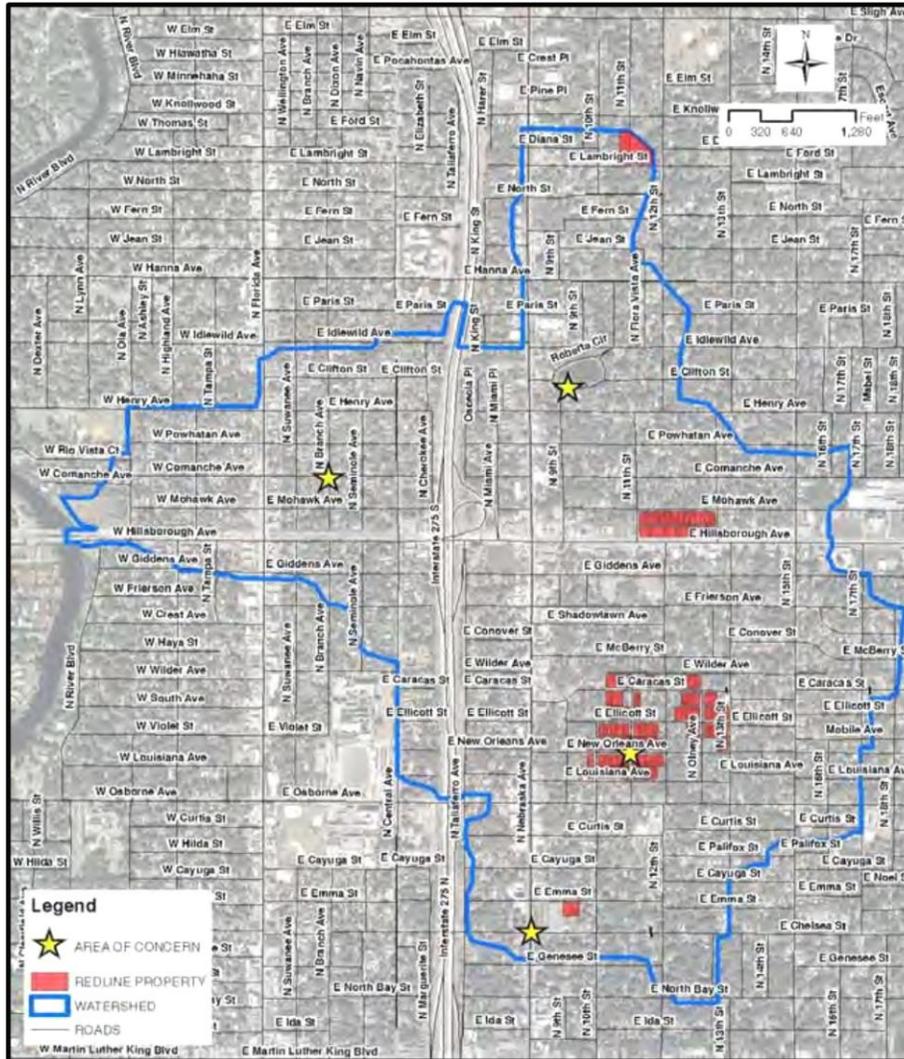
Southeast Seminole Heights Basin has numerous flooding locations, failing and undersized conveyance systems throughout the basin. A recent drainage study identified several potential stormwater improvement projects to alleviate flooding.

A feasibility study will be performed to assess the potential drainage improvement projects as recommended in the previous drainage study. Individual improvement projects will subsequently be designed and constructed throughout the basin areas to improve drainage conditions.

Location Map:



Areas of Flooding Concern:



Summary of Project Costs:

Phase	Firm	Amount	Funding Source	Schedule	
				Start	Finish
Planning Study	LWES	\$90K	COT	FY16	FY16
Feasibility Study	FDC	\$45K	COT	FY17	FY18
Design & Construction	TBD	\$30M	COT/SWFWMD	FY19	FY23

Timeline:

- Planning and drainage study was completed in FY16.
- The Feasibility Study has been completed.
- The RFQ for the design/build should advertise in November.
- The design and permitting will occur in FY19.
- Construction will begin in FY20.



5. Lower Peninsula Flooding Relief

City Project #: 1000178

Project Description:

A regional watershed model is needed to provide a baseline for capital project improvement planning and design. The area has numerous flooding locations, failing and undersized conveyance systems throughout the 6,000 acre watershed.

The purpose of the project is to develop a baseline for capital improvement planning and design that provides conceptual solutions to frequent flooding associated with undersized stormwater pipes and relic ditch systems in the region. It is the City's desire to pursue cooperative funding from the South West Florida Water Management District (SWFWMD) for these improvements; therefore, the watershed study must meet SWFWMD's requirements for funding.

Location Map:



Summary of Project Costs:

Phase	Firm	Amount	Funding Source	Schedule	
				Start	Finish
Planning Study	Applied Sciences	\$650K	COT/SWFWMD	FY16	FY18
Ph1 Feasibility study	RFQ	\$200k	COT	FY19	FY20
Ph1 Design	RFQ	\$3M	COT/SWFWMD	FY20	FY20
Ph1 Construction	RFQ	\$30M	COT/SWFWMD	FY21	FY23

Timeline:

- The existing condition model has been completed, and the consultant is working on potential solutions.
- SWFWMD is performing 3rd party review of the model.
- The Ph1 Feasibility Study will begin in FY19 and finish in FY20.
- The Ph1 Design will occur in FY20.
- The Ph1 Construction will begin in FY21 and finish in FY23.



6. Miscellaneous Capital Improvement

Project Status

Tampa City Council Update No. 8 - Oct. 2018

Construction timelines are typically six (6) months or less for neighborhood projects. For additional project descriptions, please see the project fact sheets following this project status report.

PROJECT STATUS KEY	
	Design
	Design Complete and In Construction Queue
	Under construction
	Construction Complete

STATUS	DISTRICT	ESTIMATE
Projects Assigned to Construction Contracts		
1. Woodlyn at Parkland Flooding Relief	4	\$130,000
2. Knights between Lynwood and MacDill	4	\$200,000
3. Fair Oaks and MacDill	4	\$100,000
4. Carrington at Everina	4	\$200,000
5. Howard Flooding Relief	4	\$200,000
6. Ardson Pl. & Palm Dr.	4	\$50,000
7. Palm Dr. East of Ysabella	4	\$50,000
8. Mary Sinkhole Rehabilitation	7	\$100,000
9. 2511 N. Riverside Flooding Relief	5	\$50,000
10. N River Blvd Outfall	6	\$60,000
11. W St. Isabel from Gomez to Habana Flooding Relief	6	\$75,000

Projects Bid through CAD		
12. Swann Ave: Howard to Gomez flooding relief	4	\$800,000
13. 47 th and Frierson Pond PH II	5	\$660,000
14. Howard: Swann to Morrison Flooding Relief	4	\$600,000
15. 2nd St.: Interbay to Bay	4	\$200,000
16. Wyoming flooding relief PH II	4	\$325,000
17. Anita Subdivision PH I Drainage Improvements	4	\$540,000
18. 4218 Riverside Dr. Pipe Relocation	6	\$100,000
19. Annual CIPP Rehabilitation	Citywide	\$400,000
20. Annual Box Culvert Rehabilitation	Citywide	\$650,000
21. Orchid Sink Rehabilitation	6	\$500,000
22. David E West Park Pond	7	\$1,000,000

STATUS	DISTRICT	ESTIMATE
Projects Bid through CAD – continued		
23. 43rd Street Outfall Regional Drainage Improvements, PH III	5	\$7,000,000
24. 30th St. Outfall	5	\$600,000
25. Forest Hills Park Improvements	7	\$500,000
26. Robles Park Pump Station Replacement	5	\$1,200,000
27. Rogers Park Drainage Improvements	5	\$500,000
28. Poinsettia Pump Station Rehabilitation	7	\$1,400,000
29. Eastridge Pump Station Rehabilitation	7	\$700,000
30. Copeland Park Pumping Station	7	\$375,000
31. Anita Subdivision Drainage Improvements Ph II	4	\$800,000
32. 56th St. & Broadway Ave. flooding relief	5	\$2,000,000
33. Hamilton Creek Water Quality Improvement	6	\$500,000
34. Lamb Canal Rehabilitation	4	\$1,500,000

Projects Assigned to Transportation and Stormwater Services Department In-House Crews		
35. 2908 S Westshore Flooding Relief	4	\$100,000
36. Idell St. Roadway Improvements PH II	5	\$75,000
37. Forest Hills Pond at Lake Eckles	7	\$100,000
38. Wyoming Flooding Relief PH I	4	\$150,000
39. Concordia Pond	4	\$125,000
40. Virginia Park Ph3, Lois from Bay to Bay to Palmira	4	\$500,000
41. Virginia Park Ph3, Clark from Bay to Bay to Palmira	4	\$325,000
42. Hilda: North Blvd to Clearfield	6	\$50,000
43. New Orleans/11th St. Pond	5	\$100,000
44. Seneca Pump Station Site Improvements	7	\$100,000
45. Gomez Alley between Kennedy & North A	4	\$75,000
46. Binnicker at 4 th St.	4	\$50,000
47. Albany: Barclay to Marinana	7	\$100,000
48. Neptune/Treasure PID	6	\$75,000
49. 3911 Swann Ave.	6	\$50,000
50. 1510 W Park Ln.	6	\$50,000
51. Rambla Flooding Relief	7	\$100,000
52. 45th St. north of Hillsborough Flooding Relief	6	\$150,000
53. Paloma Place Flooding Relief	4	\$75,000

STATUS	DISTRICT	ESTIMATE
Projects Assigned to Transportation and Stormwater Services Department In-House Crews – <i>continued</i>		
54. Emma and Seminole Flooding Relief	6	\$100,000
55. Iowa Ave. – Sheridan to Sherwood	4	\$75,000
56. W Jetton Ave. between Armenia & Moody	4	\$125,000
57. North St. & Packwood Pond	6	\$100,000
58. Hale Ave at Cleveland St.	6	\$100,000
59. Sherrill St. north of Cleveland St.	6	\$100,000

Woodlyn at Parkland Flooding Relief

FY2017, District 4

Estimated cost: \$130K

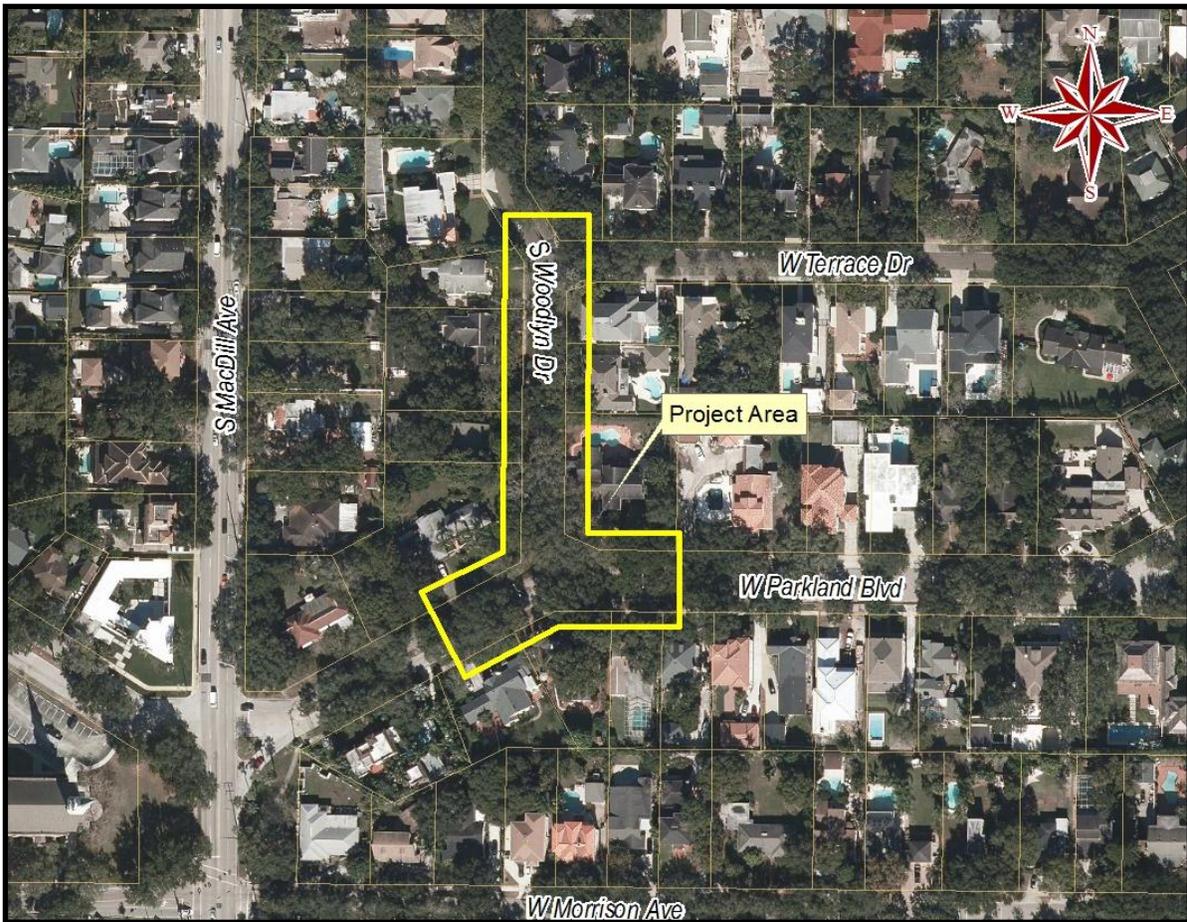
- **Project Description:**

The project consists of removing some trees and re-contouring the roadway.

- **Justification:**

Flooding occurs at S Woodlyn Drive and Parkland Blvd due to improper grading and heaving of pavement caused by tree roots.

Project Map



Knights Between Lynwood and MacDill

Flooding Relief FY2017, District 4

Estimated cost: \$200K

- **Project Description:**

Install a stormwater collection system to drain the street.

- **Justification:**

Pavement grading and new development have affected the conveyance of runoff to the existing stormwater system.



Fair Oaks and MacDill

Flooding Relief FY2017, District 4

Estimated cost: \$100K

- Project Description:**

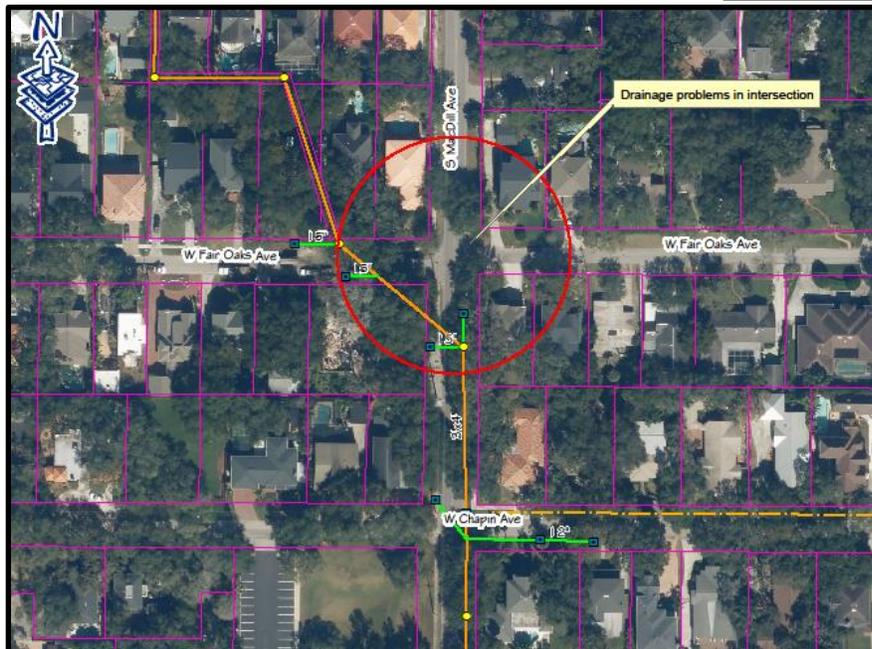
The proposed project consists of re-contouring of the existing pavement to improve conveyance of storm flows.

- Justification:**

This section of Fair Oaks Ave. has frequent flooding due to improper grading. This project will improve conveyance to relieve flooding.



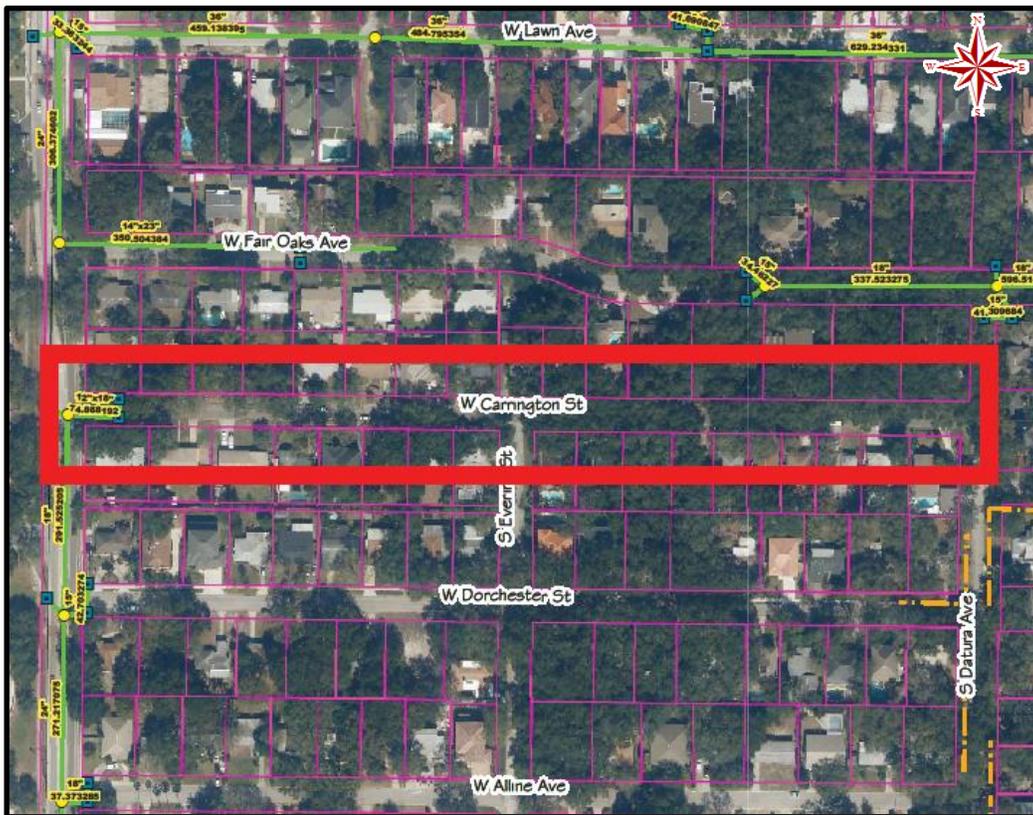
Project Map



Carrington at Everina Flooding Relief FY2017, District 4 Estimated cost: \$200K

- **Project Description:**
The project consists of the regrading of the existing asphalt pavement to improve the drainage
- **Justification:**
The project reduces the flooding affecting residential properties and roadways.

Project Map



Howard Flooding Relief

FY 2017, District 4

Estimated cost: \$200K

- **Project Description:**

An inlet will be installed at the corner of Howard Ave. and Marjory Ave. Surface runoff will be pumped to an existing inlet at Watrous Ave. and Howard Ave. Project also includes resurfacing Howard Ave. to improve drainage.

- **Justification:**

Flooding occurred at the intersection of Howard Ave. and Marjory Ave. due to inadequate drainage capacity. The proposed project will reduce the localized flooding.

Project Map



Ardson Pl. & Palm Dr.

Flooding Relief FY2017, District 4

Estimated cost: \$50K

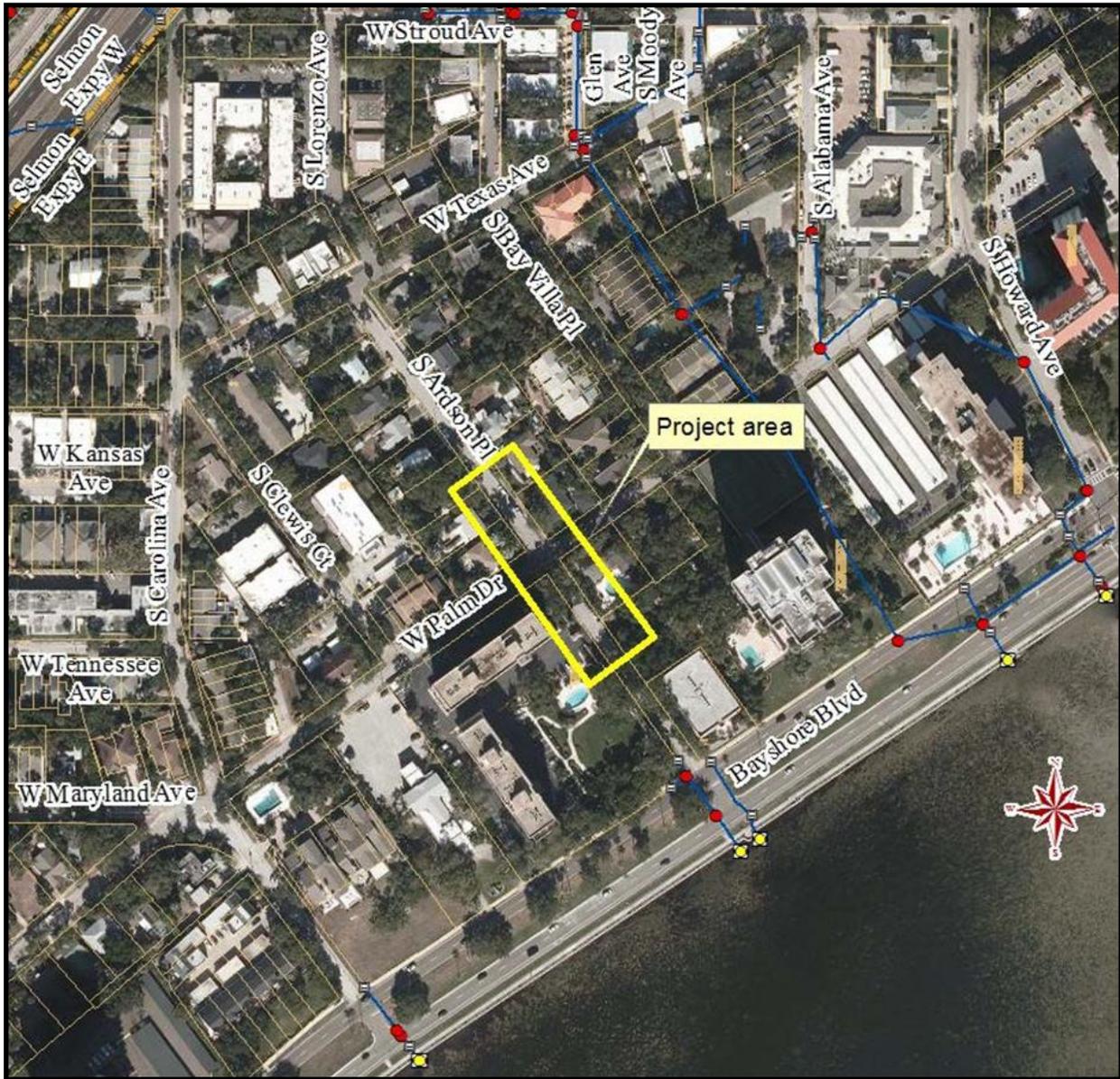
- **Project Description:**

The project consists of regrading of the roadway.

- **Justification:**

This intersection experiences flooding due to improper grading. The project will improve conveyance to relieve localized flooding in the intersection.

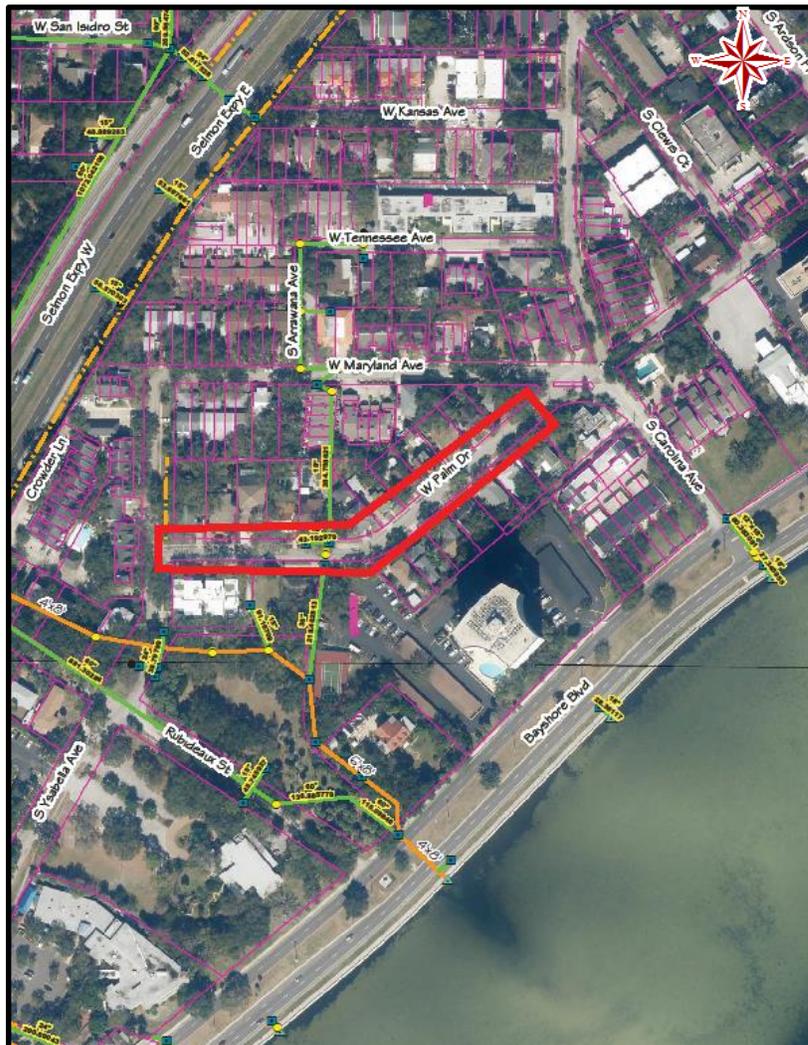
Project Map



Palm Dr. East of Ysabella Flooding Relief FY2017, District 4 Estimated cost: \$50K

- **Project Description:**
Modifications to the existing surface water management system to improve the conveyance of runoff to the existing stormwater system.
- **Justification:**
Frequent flooding from blocked drainage due to pavement overlays. Re-grading and resurfacing will improve conveyance to relieve flooding.

Project Map



Mary Sinkhole Rehabilitation

Flooding Relief FY2017, District 7

Estimated cost: \$100K

- **Project Description:**

The project consists of replacing the failed 24-inch influent pipe, removing trash and debris from the sink, and stabilizing the embankment.

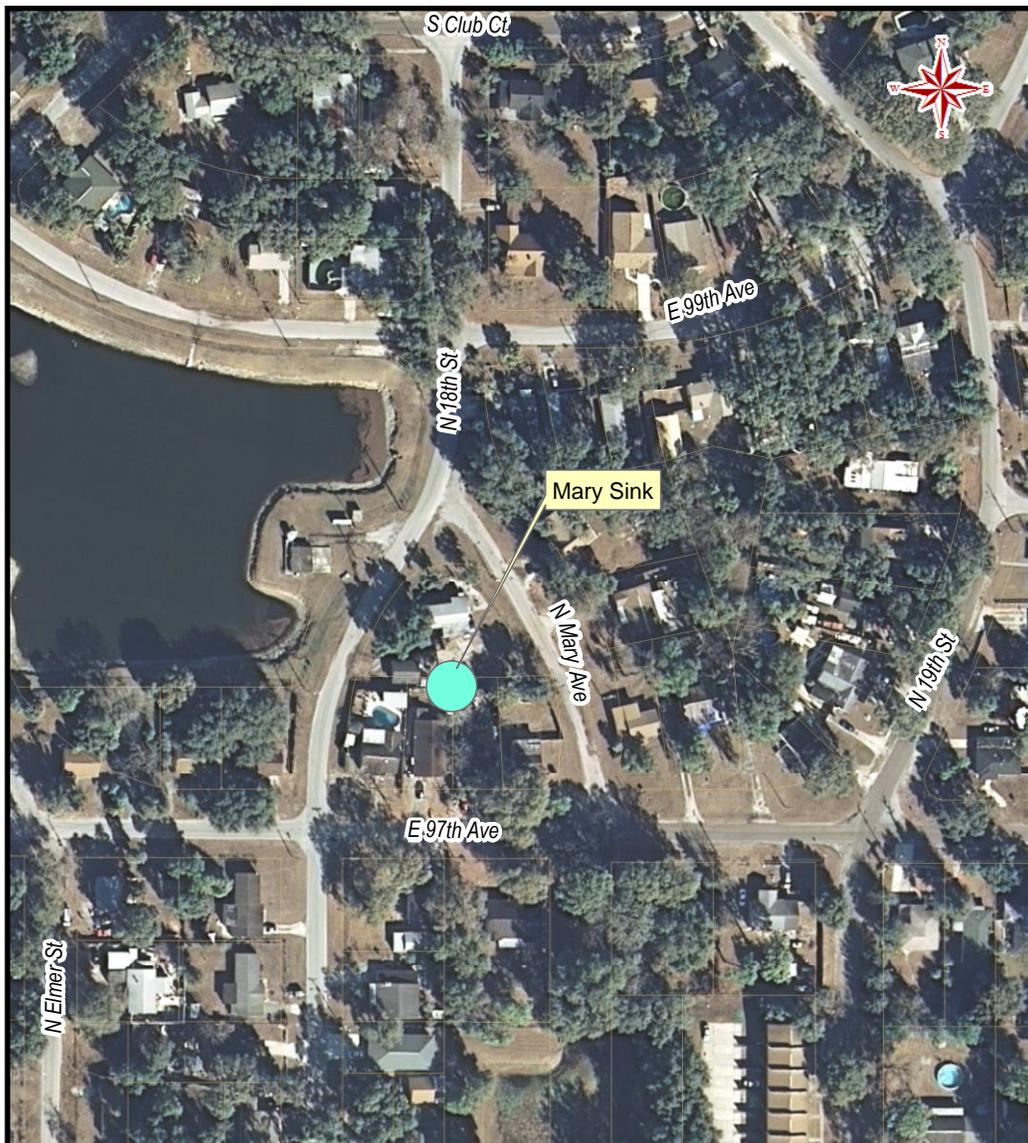
- **Justification:**

Sinkhole currently is filled with debris and the influent pipe failed.

- **Related Issues:**

Within the North Tampa Closed Basin

Project Map



2511 N Riverside Flooding Relief

Flooding Relief FY2018, District 5

Estimated cost: \$50K

- **Project Description:**

The project consists of removal of existing pipes and inlets, construction of new pipes and inlets, cutting sea wall and sealing opening, and roadway restorations.

- **Justification:**

The existing pipes and inlets are failing.

Project Map



N River Blvd Outfall Flooding Relief

Flooding Relief FY2018, District 6

Estimated cost: \$60K

- **Project Description:**

This project will install new piping system to collect and convey the surface runoff into the adjacent Hillsborough River. The project consists of construction of new pipes and inlets, regrading along the property lines, and construction of a new outfall.

- **Justification:**

The existing drainage system in the area is inadequate and results in localized flooding in the area.

Project Map



W St. Isabel from Gomez to Habana Flooding Relief

Flooding Relief FY2018, District 6

Estimated cost: \$75K

- **Project Description:**

The proposed project will replace the existing ditch system with new pipes and inlets.

- **Justification:**

Development in the vicinity utilizes drainage ditches to collect and convey surface runoffs. Over the years, the ditch system has deteriorated and causes localized flooding

Project Map



Swann Ave: Howard to Gomez Flooding Relief

FY 2017, District 4

Estimated cost: \$400K

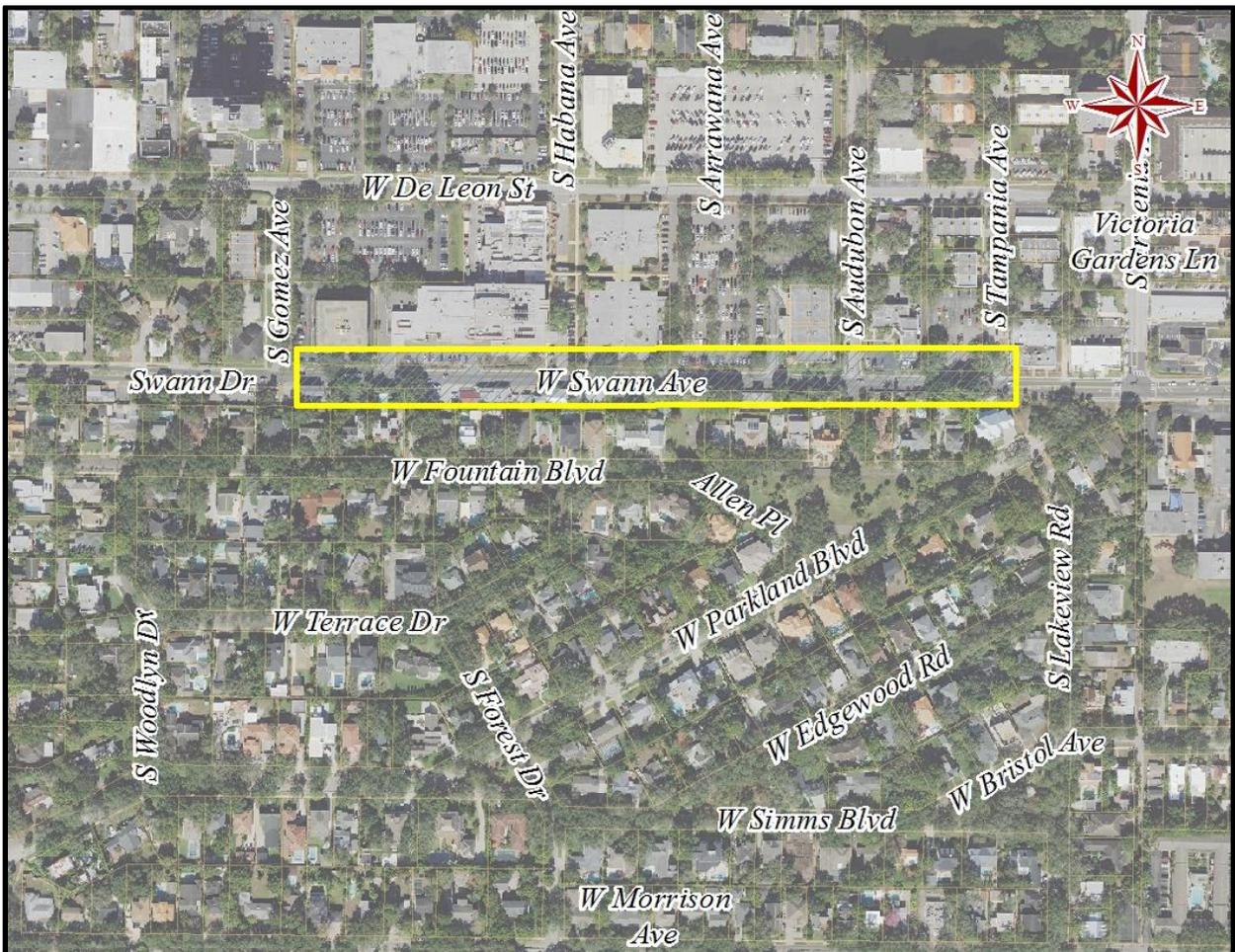
- **Project Description:**

The project will construct a stormwater conveyance system to relieve the flooding on Swann Ave. from Gomez Ave. to Audubon Ave. in the vicinity of the Memorial Hospital.

- **Justification:**

Flooding occurs along Swann Ave. between Gomez Ave. and Audubon Ave. This project will alleviate the localized flooding.

Project Map



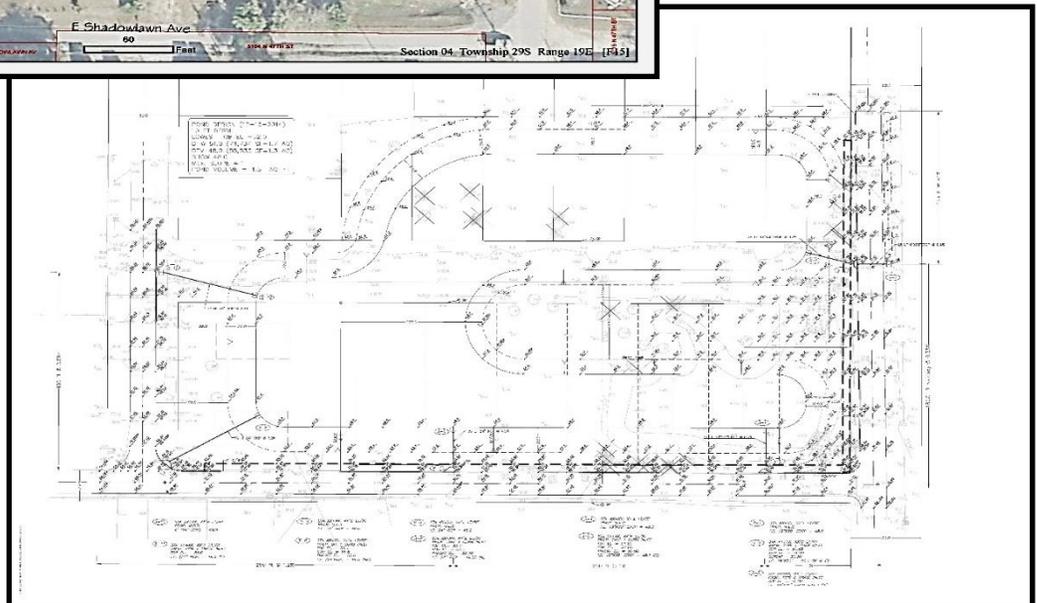
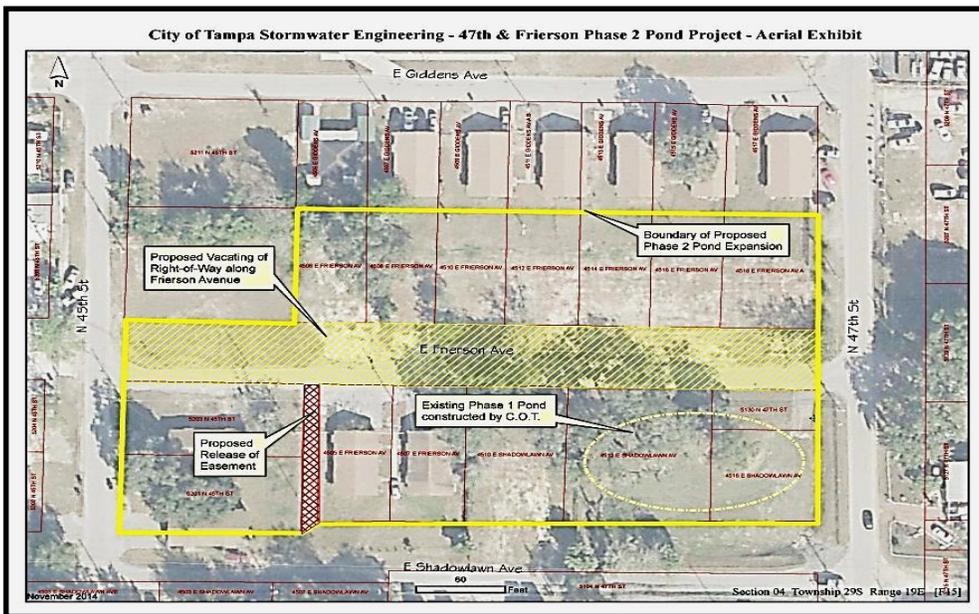
47th and Frierson Pond PH II

Flooding Relief FY2017, District 5

Estimated cost: \$660K

- **Project Description:**
City has completed land acquisition phase and Frierson Ave will be completely vacated between 47th St and 45th St.
- **Justification:**
Due to closed basin and lack of drainage system, the City will be expanding drainage capacity in the Frierson Ave & 47th Street area to help alleviate flooding problems. Besides pond expansion in Phase 2, roadway repaving and re-routing of water system will be part of the pond construction work.
- **Related Issues:**
Existing pond built in phase 1 will be expanded in Phase 2.

Project Map



Howard: Swann to Morrison– Flooding Relief PH II

FY2017, District 4

Estimated cost: \$600K

- **Project Description:**

Roadway re-grading from Morrison to Swann and potential construction of a surface water management system in coordination with roadway surfacing.

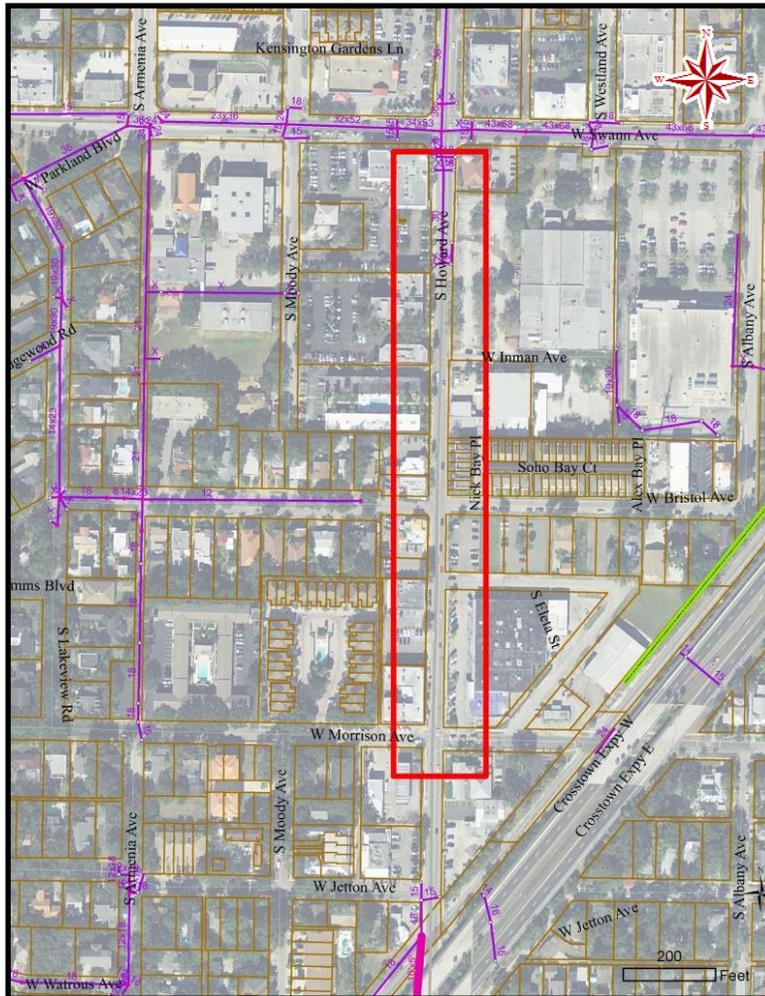
- **Justification:**

Ponding occurs in the travel lanes due to poor grading associated with pavement overlay. The project is needed to convey runoff and relieve the ponding.

- **Related Issues:**

Design and construction will be accomplished in coordination with the Transportation paving project.

Project Map



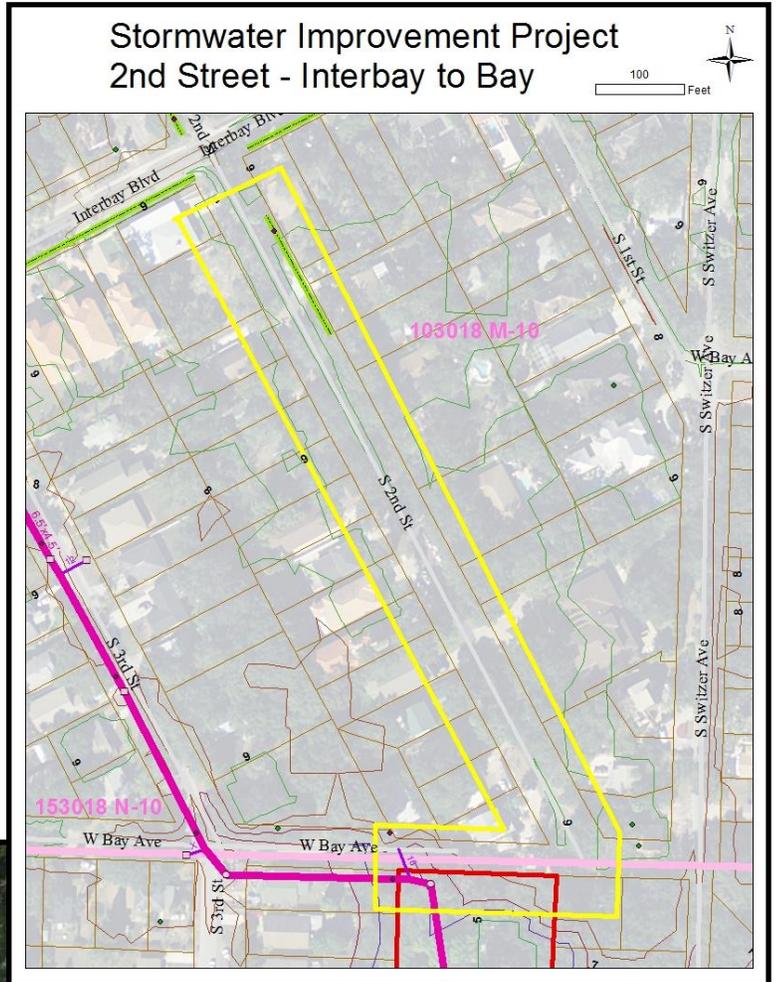
2nd Street: Interbay to Bay

Flooding Relief FY2017, District 4

Estimated cost: \$200K

- **Project Description:**
New Drainage system to be proposed along 2nd Street to connect to box culvert along W. Bay Ave.
- **Justification:**
Severe Street flooding along S 2nd Street between Interbay Blvd to W Bay Ave.
- **Related Issues:**
S. 2nd Street dead ends before W. Bay Ave.
Easement may be required to connect to existing box culvert along W Bay Ave.

Project Map & Photo



Wyoming Flooding Relief PH II

Flooding Relief FY2017, District 4

Estimated cost: \$325K

- **Project Description:**

This project will upgrade the drainage system on 2nd St. and provide a connection to box culvert at 3rd St.

- **Justification:**

Development in the vicinity of Wyoming/Bernie Avenue utilizes a system of drainage ditches to convey runoff to Interbay Blvd. The ditch system has been compromised by discontinuous driveway culverts and lack of system on Interbay Blvd.

- **Related Issues:**

This project is a continuation of Wyoming/Trilby Phase I.



Project photos

Project Map



Anita Subdivision PH I Drainage Improvements

Flooding Relief FY2020, District 4

Estimated cost: \$540K

- **Project Description:**

Consultant will evaluate the current drainage patterns and identify areas where ponding occurs. City crews will reestablish the relic ditches and correct the driveway culverts.

- **Justification:**

This neighborhood was developed with ditches draining to a collection system that discharged the stormwater to a system on Westshore Blvd. Over the years the ditches have been filled and driveway culverts have been installed improperly.

Project Map



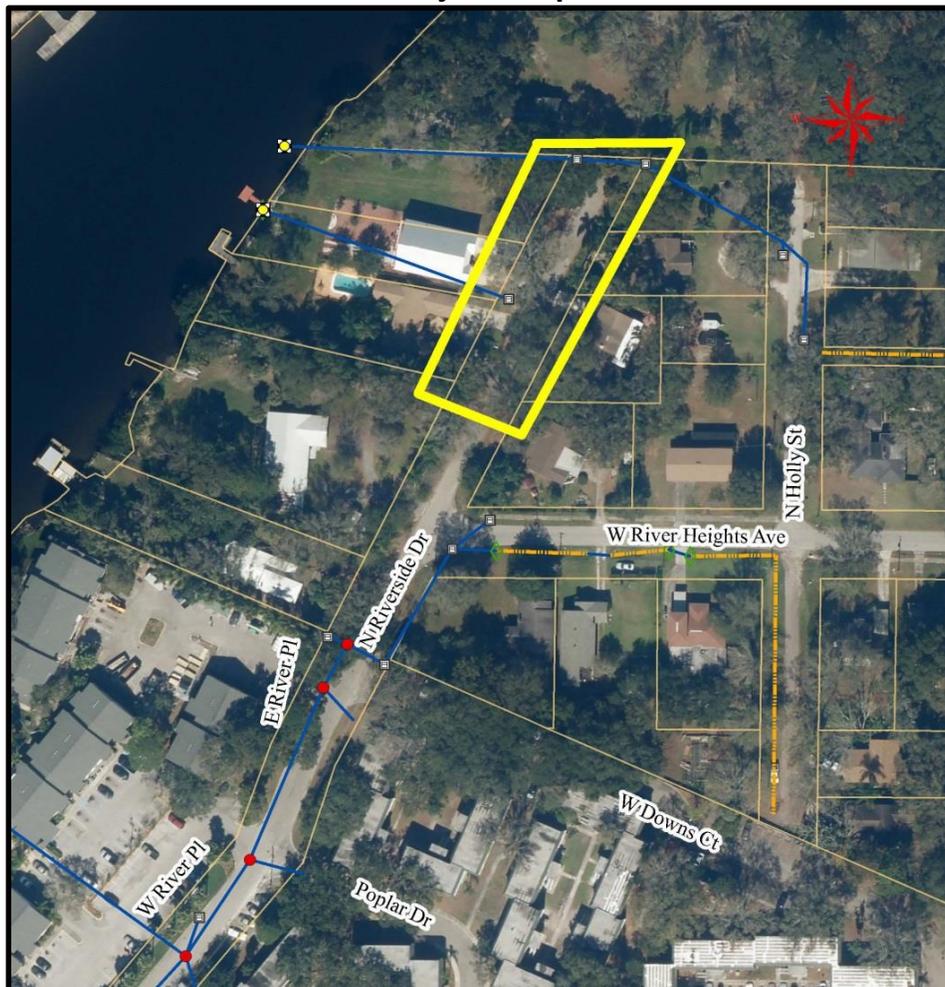
4218 Riverside Dr. Pipe Relocation

FY 2017, District 6

Estimated cost: \$100K

- **Project Description:**
The Project will replace/reroute the pipe under structure and the failing pipe.
- **Justification:**
Aging pipe under structure and failing pipe reported by residents in the area. The proposed project will enhance public safety and improve drainage in the area.

Project Map

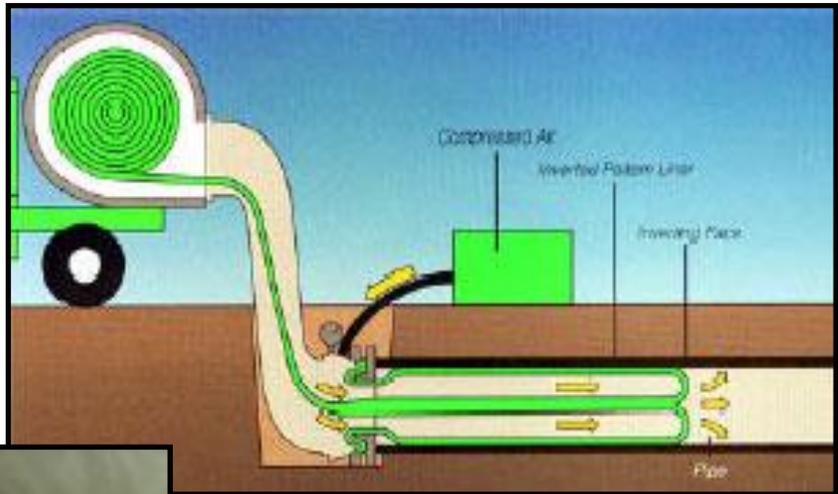


Annual C.I.P.P. Rehabilitation

FY2018, Citywide

Estimated cost: \$400K

- **Project Description:**
The scope of work includes labor, materials, and equipment to rehabilitate gravity stormwater pipes from 12-inch to 48-inch diameter by installation of cured-in-place pipe liner.
- **Justification:**
The project provides rehabilitation of deteriorated stormwater pipe systems.



Project Photos



Annual Box Culvert Rehabilitation

FY2018; Citywide

Estimated cost: \$650K

- **Project Description:**
Create an annual contract to address the repairs in a timely fashion as they become evident.
- **Justification:**
The City has numerous box culverts that are over 75 years old. These structures need remedial work to repair spalled concrete and joint leaks.
- **Related Issues:**
Repair major culverts within roadways prior to resurfacing or rebuilding the roads.



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Project Photos

Orchid Sink Rehabilitation

Flooding Relief FY2018, District 6

Estimated cost: \$500K

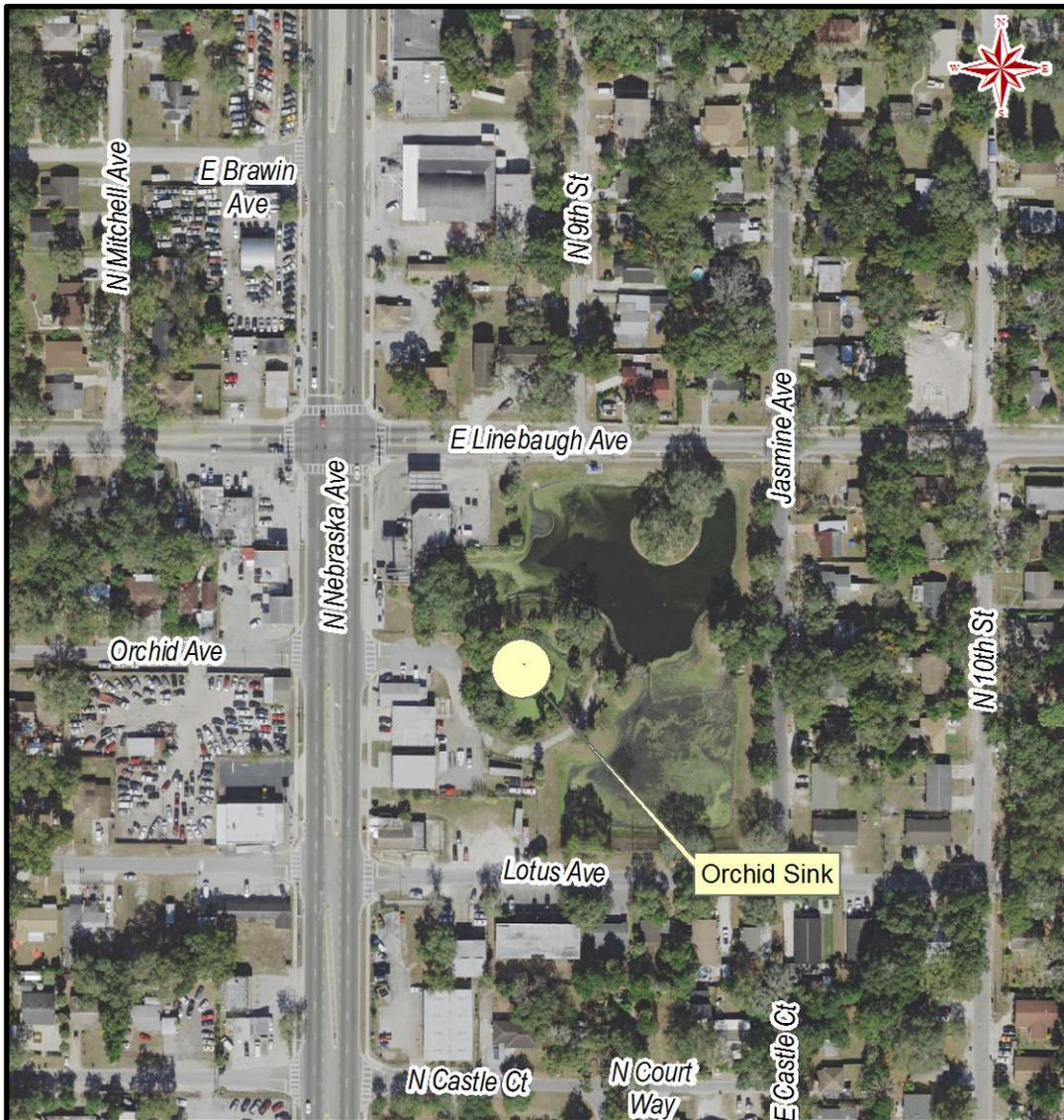
- **Project Description:**

The project consists of removing trash and debris from the sink and stabilizing the embankment.

- **Justification:**

Orchid sink, which serves as outfall for runoffs from the neighboring area, currently is clogged with trash and debris. This project will re-establish the sinkhole connectivity.

Project Map



David E West Park Pond Enhancements

FY2017, District 7

Estimated Cost: \$1M

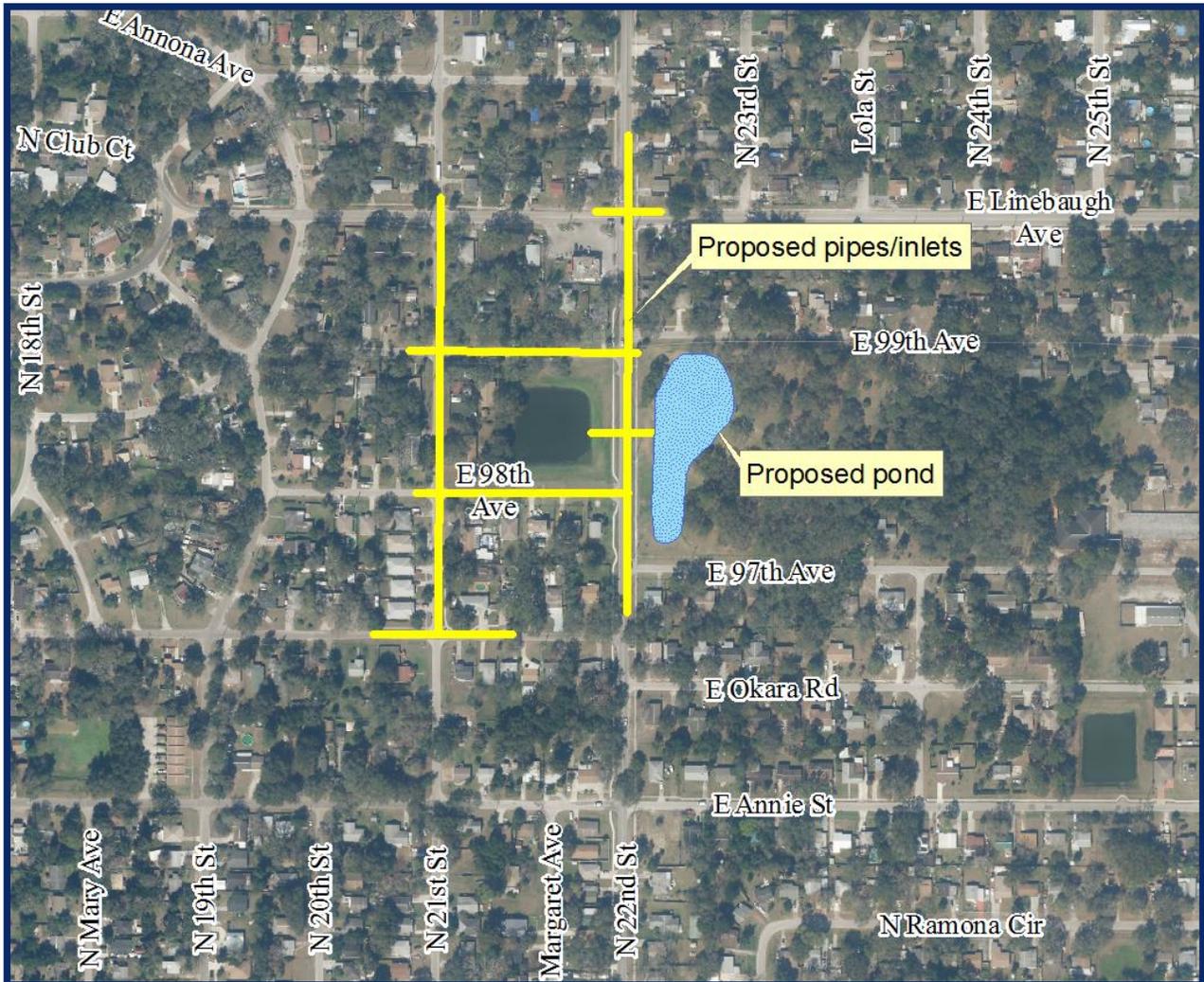
- **Project Description:**

The project consists of the construction of a stormwater pond, pipes, and inlets on City lands. The pond will be hydraulically equalized with an existing stormwater pond, thus providing additional back-up volume to relieve downstream flooding.

- **Justification:**

Attenuation storage is needed in this area because it is a closed basin with limited receiving capacity in the receiving sink. Multiple flooding complaints have been received.

Project Map



43rd Street Outfall PH III

Regional Drainage Improvement - FY2017, District 5

Estimated cost: \$5M (City Share \$2.5M)

- Project Description:**

The project consists of the construction of a 48-inch RCP pipe from the Phase 2 regional stormwater pond to the 43rd Street Outfall just upstream of McKay Bay. Additionally, a culvert upgrade will be constructed at the terminus of the 43rd Street ditch to reduce flooding on adjacent properties.

- Justification:**

The project provides a new secondary outfall to convey runoff from the Phase 2 regional pond to the 43rd Street Outfall. Phase 3 improvements provide additional flood relief for properties and roadways that are severely impacted.

Project Map



30th Street Outfall

FY 2017, District 5

Estimated cost: \$600K

- **Project Description:**

Stormwater has acquired the property on the east side of the outfall. The intent is to enlarge the discharge channel and, if necessary construct a larger outfall structure to accommodate future pipes.

- **Justification:**

Existing 60-inch diameter stormwater pipe outfalls to Hillsborough River at 30th St., causing continual erosion of adjoining properties. City crews have installed rip-rap to fortify the banks, but erosion has persisted.

- **Related Issues:**

Several stormwater pump stations utilize the existing outfall pipe and expanding the channel will allow for the extension of force mains directly to the river.

Project Map



Forest Hills Park Improvements

FY2017, District 7

Estimated cost of Stormwater Share: \$250K

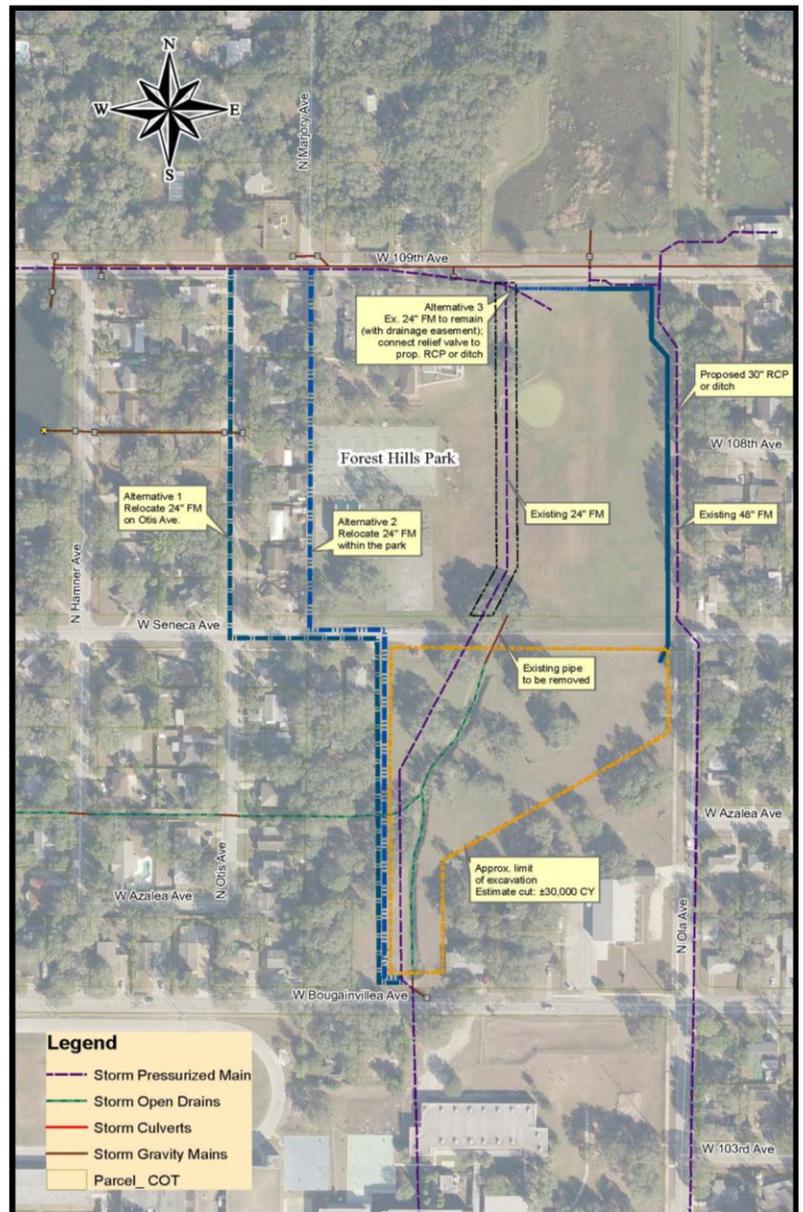
• **Project Description:**

The scope of this project is to design a pond on the southern portion of the property and a stormwater collection system for the field area which will convey runoff to the pond. The pond will require a pumped outfall. The basin analysis shall include the outfall rate for future design of a pumping station by others. Topographic survey will be needed to evaluate what elevation the field can be raised to without impacting abutting properties and to evaluate the disposition of the tennis courts. Surface improvements may include new tennis courts or other recreational facilities and additional parking. Parks and Rec is co-funding this design with Stormwater Engineering as Stormwater will be a co-funding participant for the construction project. Stormwater has also identified the need to construct a piping system on the south side of 109th Ave., to convey emergency bypass flow, and to continue the piping system along the east side of the property to collect and convey runoff from 108th Ave. and Seneca Ave.

Project Map

• **Justification:**

The Parks Department has an existing baseball field located in a low area that holds water during the rainy season causing it to be unusable. Parks would like to raise the low lying areas to provide for a dry playing field during the summer months. Stormwater is providing funding and assistance to relocate the low area.



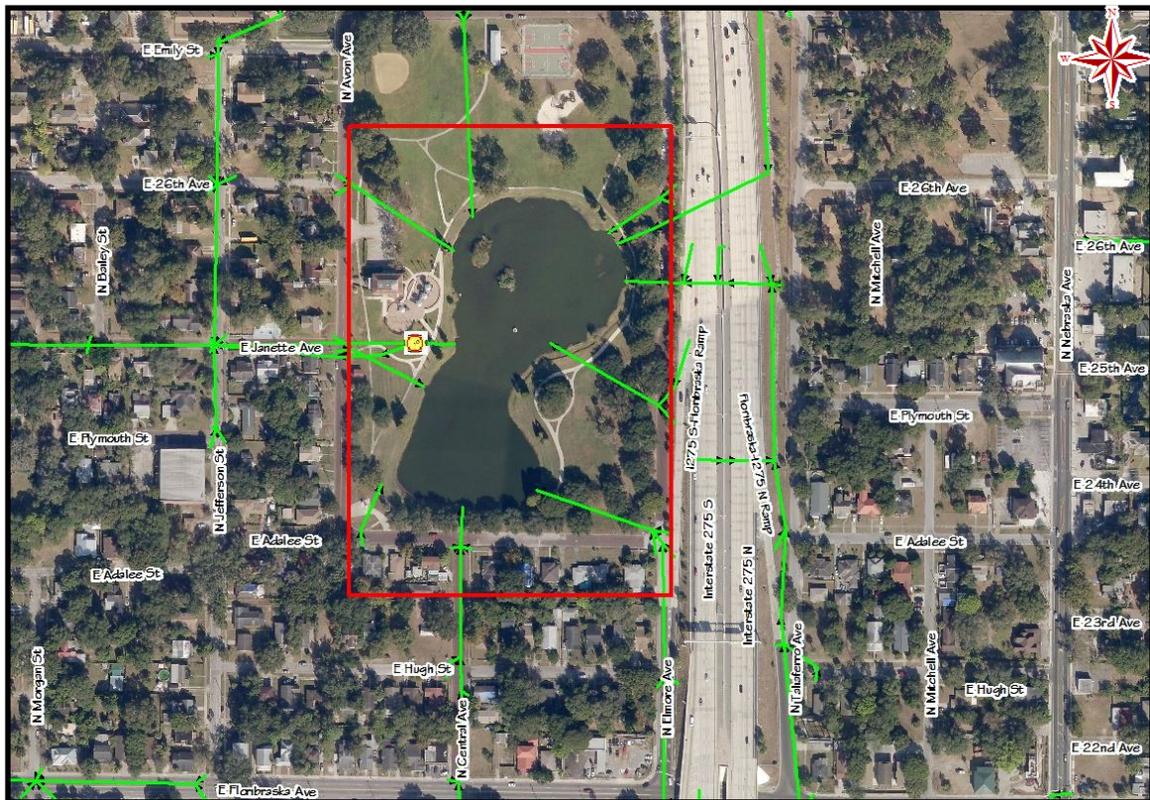
Robles Park Pump Station Replacement

FY2017, District 5

Estimated cost: \$1.20M

- **Project Description:**
Pump station will be replaced with more efficient pumping equipment.
- **Justification:**
This is an aging facility with ongoing maintenance concerns. Older pump station needs rehab to improve flooding relief.

Project Map



Rogers Park Drainage Improvement

Flooding Relief FY2018, District 5

Estimated cost: \$ 500K

- **Project Description:**

The project consists of replacing/relocating the failed 24 inch pipe and construction of new inlets and new outfall to the river.

- **Justification:**

Recent TV inspection has shown several areas of failed pipe, cave-ins, and root intrusions. Current pipe location is inaccessible due to railroad spur.

- **Related Issues:**

Need to coordinate with the Water Department's reconstruction of the railroad spur.

Project Map



Poinsettia P.S. Rehabilitation

Flooding Relief FY2018, District 7

Estimated cost: \$1.4M

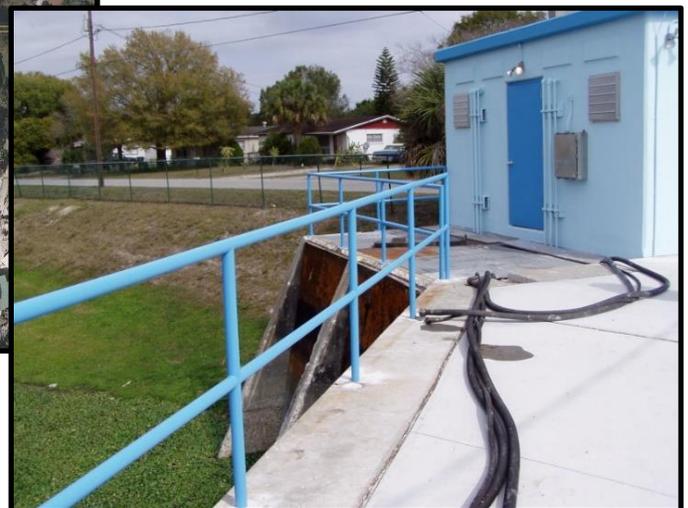
- **Project Description:**

This project consists of removal of the failed hydraulically driven pumps and the installation of two new electric submersible pumps and motor controls. New pumps will match the existing flow and provide a more energy efficient system.

- **Justification:**

The Poinsettia Pump station was equipped in 1988 with hydraulically driven pumps and augmented with additional pumping capacity in 2005 and 2010. When the Donut Pond Pump Station was activated in 2015 upstream of this location, demand at this station was reduced.

Project Map



Eastridge P.S Rehabilitation

Flooding Relief FY2018, District 7

Estimated cost: \$700 K

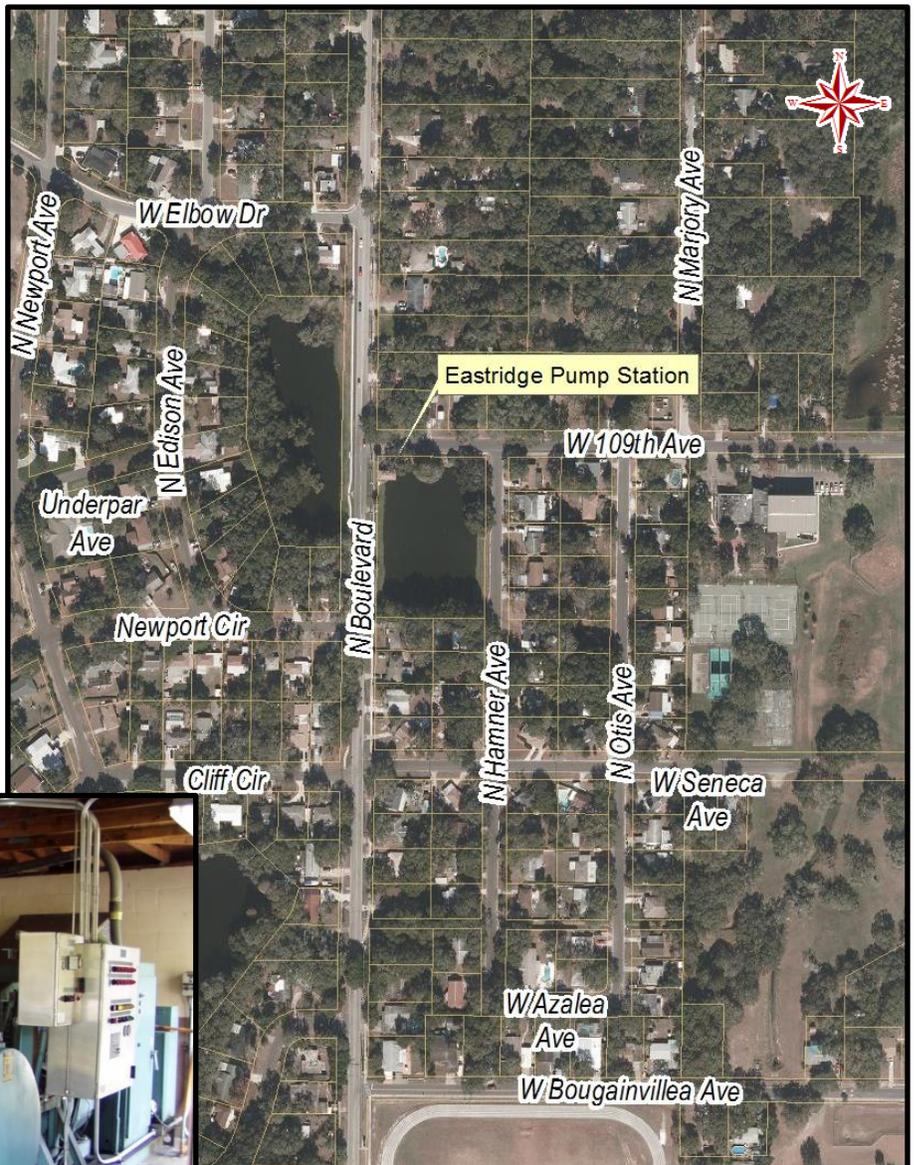
- **Project Description:**

The project consists of removal of the hydraulically driven pump and installation of two electric submersible pumps and motor controls to provide redundancy.

- **Justification:**

The Eastridge Pump Station was constructed in 1983 with a single hydraulically driven pump. Repairs and maintenance has increased in the past five years.

Project Map



Copeland Park

Flooding Relief FY2018, District 7

Estimated cost: \$375K

- **Project Description:**

The project consists of construction of a new pump station and force main connecting to the existing drainage system on N 22nd St. at Colby Ln area.

- **Justification:**

Currently a temporary pump is utilized to drain the low-lying area in Copeland Park. The proposed project will replace the temporary pump with a permanent pump station and provide a more reliable system to better alleviate the flooding in the area.

Project Map



56th St & Broadway Ave Flooding Relief

Flooding Relief FY2019, District 5

Estimated cost: \$2M

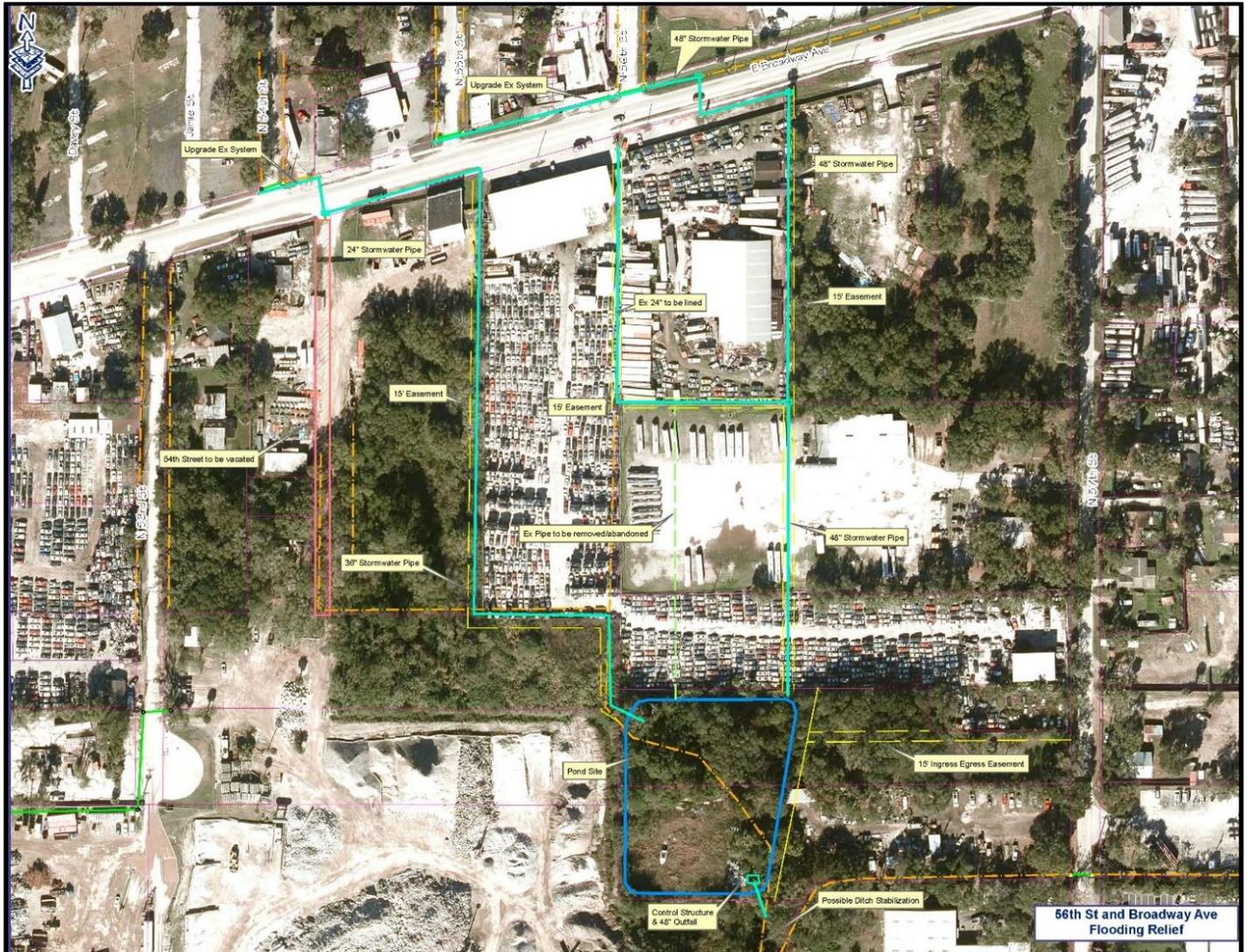
- Project Description:**

This section of Broadway Avenue experiences frequent flooding resulting from a combination of undersized piping systems and failing ditches. This project consists of property acquisition for a new stormwater pond that will provide water quality treatment and attenuation for the area, and the relocation, replacement and upsizing of pipes and ditches.

- Justification:**

This section of Broadway Avenue experiences frequent flooding resulting from a combination of undersized piping systems and failing ditches. The proposed project will improve drainage in the area.

Project Map



Hamilton Creek Water Quality Improvements

Water Quality FY2019, District 6

Estimated cost: \$500K

- **Project Description:**

The scope of this project is to construct a 5 stormwater pond treatment facility for Hamilton Creek, which outfalls to the Hillsborough River.

- **Justification:**

The receiving section of the river has been listed by the Florida Department of Environmental Protection as impaired for fecal coliforms. This segment of the river was issued a Total Maximum Daily Load (TMDL) for nutrients and fecal coliforms and is currently under Basin Management Action Plan (BMAP) requirements for water quality improvements. The proposed project is part of the effort to improve the Hillsborough River water quality by reducing the amount of fecal coliform and nutrients discharged to the river. The Lowry Park Zoo supports this project and will be cooperative in implementing educational environmental programs on the project site to benefit the public.

Project Map



2908 S Westshore Flooding Relief

Flooding Relief FY2017, District 4

Estimated cost: \$100K

- **Project Description:**

The project consists of installation of a trench drain system to alleviate flooding at a low lying area at 2908 S. Westshore.

- **Justification:**

The location has inadequate surface water conveyance due to roadway super elevation resulting in frequent yard and street flooding. The project is desirable because it will provide relief for localized flooding.

Project Photo



Project Map



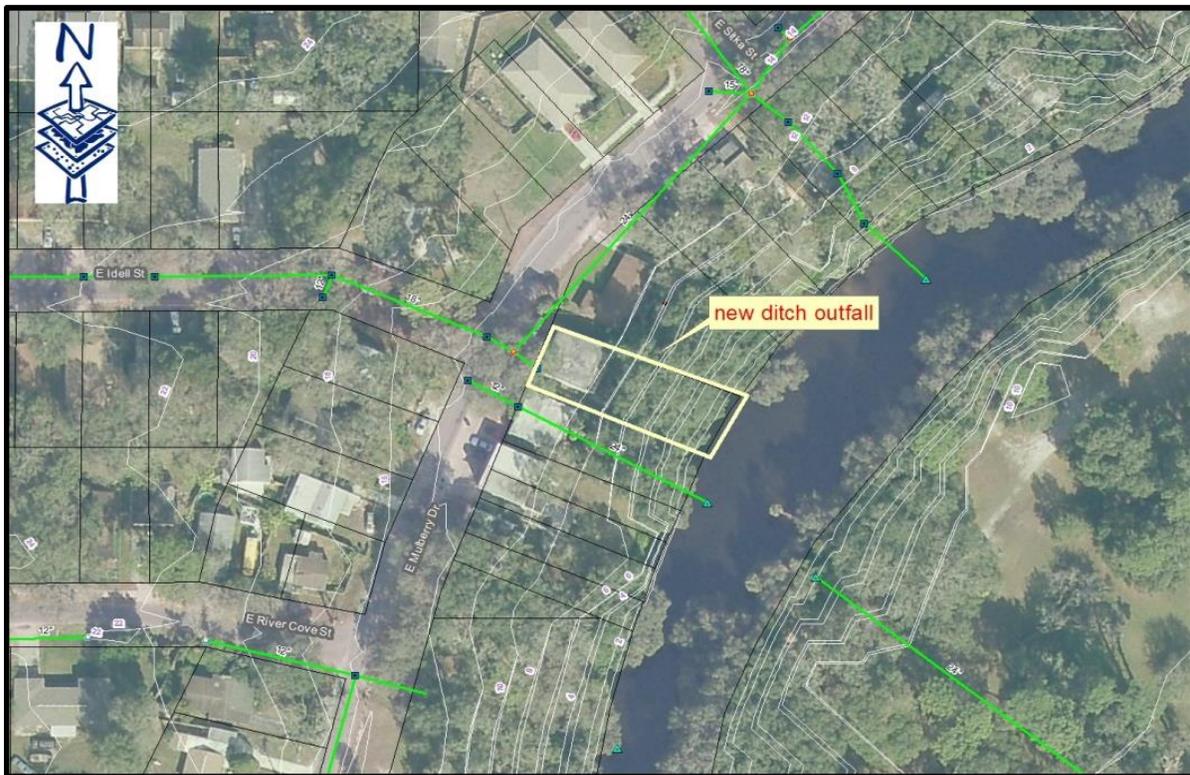
Idell St. Roadway Improvements PH II

Flooding Relief FY2017, District 5

Estimated cost: \$75K

- **Project Description:**
Construction of new ditch system discharging to the Hillsborough River.
- **Justification:**
Phase 2 of Idell Street Roadway improvements which will provide for a new outfall into the River. Stormwater in-house construction crews will be responsible for installing the new outfall via ditch to the River.
- **Related Issues:**
Site located at 1911 E. Mulberry.

Project Map

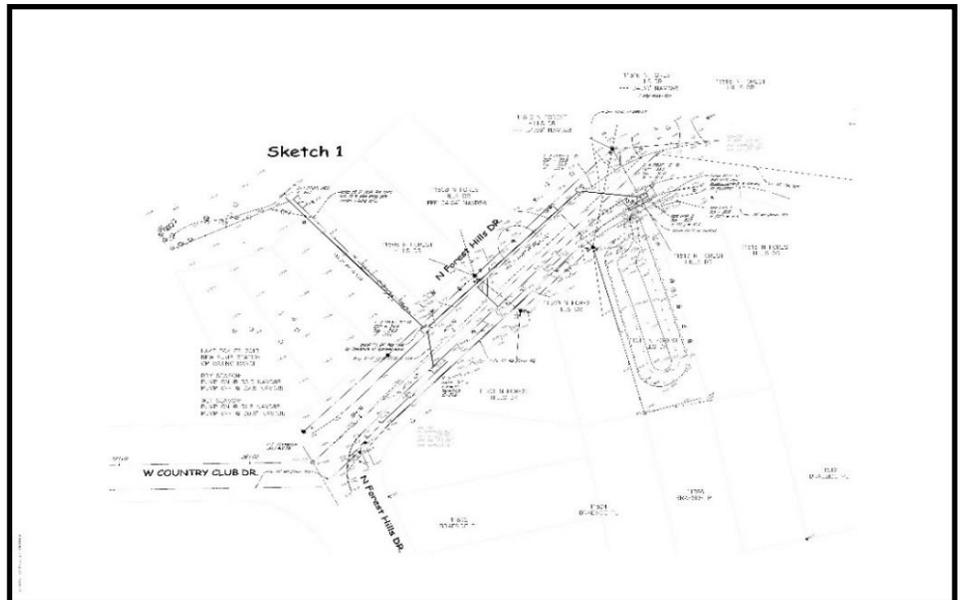


Forest Hills Pond at Lake Eckles

Flooding Relief FY2017, District 7

Estimated cost: \$100K

- **Project Description:**
Proposing drainage system in the ROW to provide conveyance of flood water to Lake Eckles.
- **Justification:**
The surrounding street and the resident at 11513 N Forest Hills Drive has been experiencing flooding during rain events.
- **Related Issues:**
The existing stormwater pump station has been completely rebuilt recently, which is the discharge mechanism for Lake Eckles.



Project Design & Photo



Wyoming Flooding Relief PH I

Flooding Relief FY2017, District 4

Estimated cost: \$150K

- **Project Description:**

This project will evaluate the entire neighborhood and provide a solution to reduce flooding and convey water to existing system on Leila and Elkins Ave.

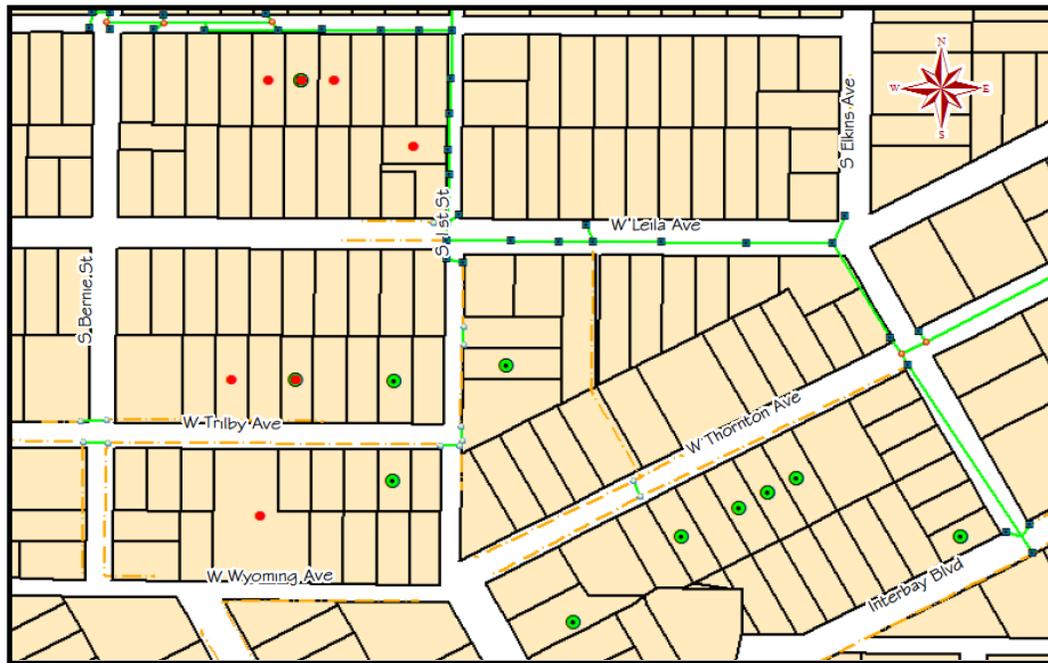
- **Justification:**

Development in the vicinity of Wyoming/Trilby/Thornton Avenue utilizes a system of drainage ditches to collect runoff. The ditch system has been compromised by roots of large trees and improper installation of culverts.

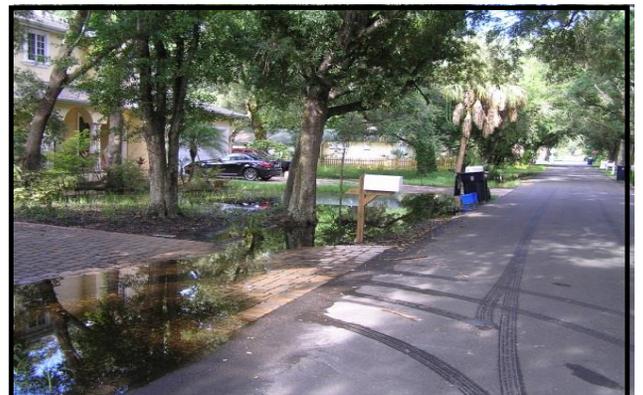
- **Related Issues:**

This project will be phased over two years.

Project Map



Project Photos



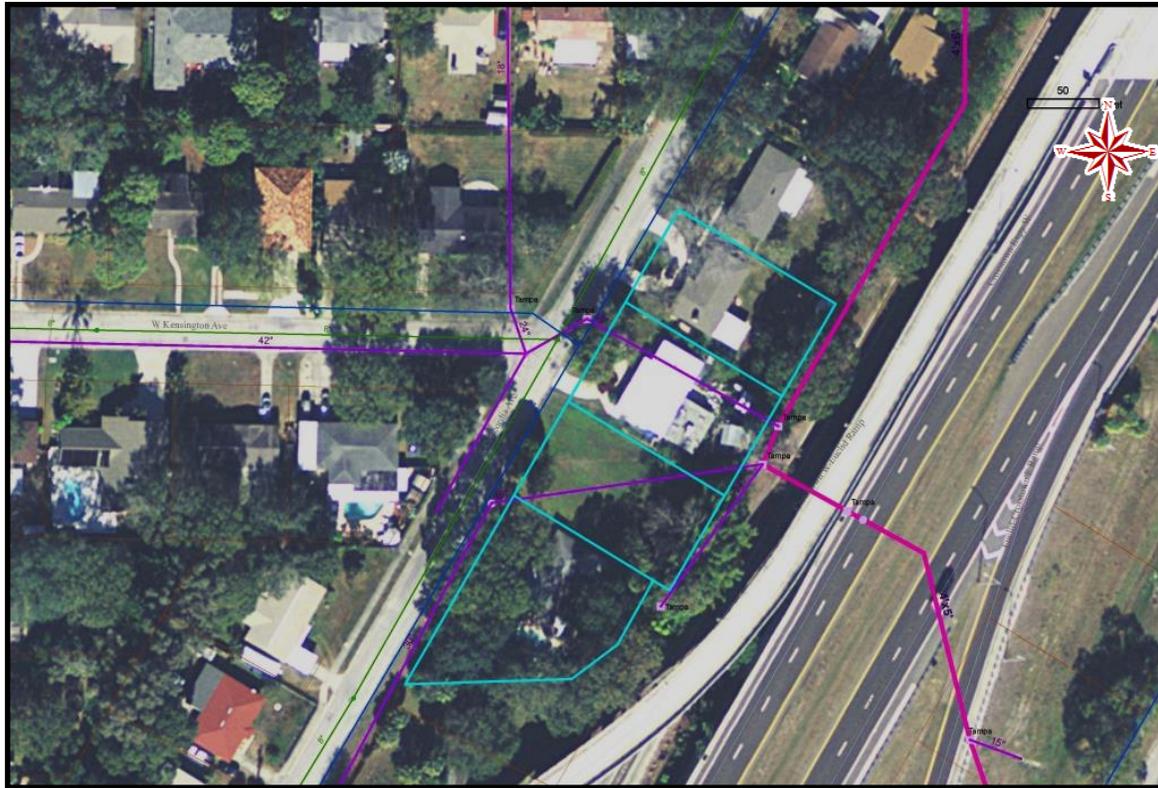
Concordia Pond

Flooding Relief FY2017, District 4

Estimated cost: \$125K

- **Project Description:**
Four parcels have been acquired to construct a drainage pond to provide additional drainage system capacity before discharge to box culvert in adjacent CSX corridor.
- **Justification:**
During heavy rain events, several parcels at corner of Concordia and Kensington experience flooding due to outdated drainage system.
- **Related Issues:**
CSX drainage connection permit will be obtained before construction.

Project Map



Virginia Park PH3, Lois from Bay to Bay to Palmira

Flooding Relief FY2017, District 4

Estimated cost: \$500K

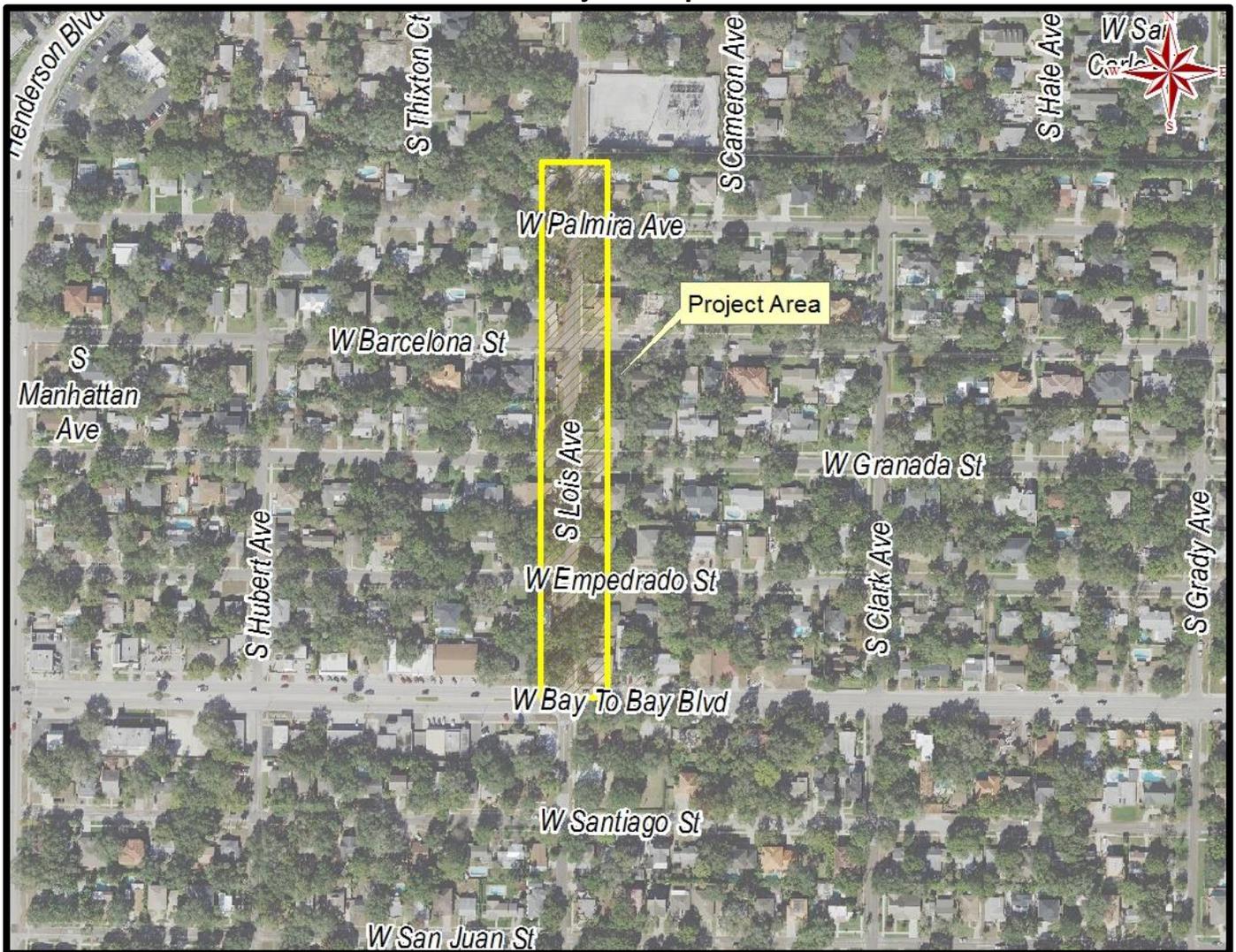
- **Project Description:**

The project consists of regrading of the roadway to improve drainage.

- **Justification:**

Localized flooding occurs at intersections along S. Lois Ave. The proposed project will alleviate the flooding.

Project Map



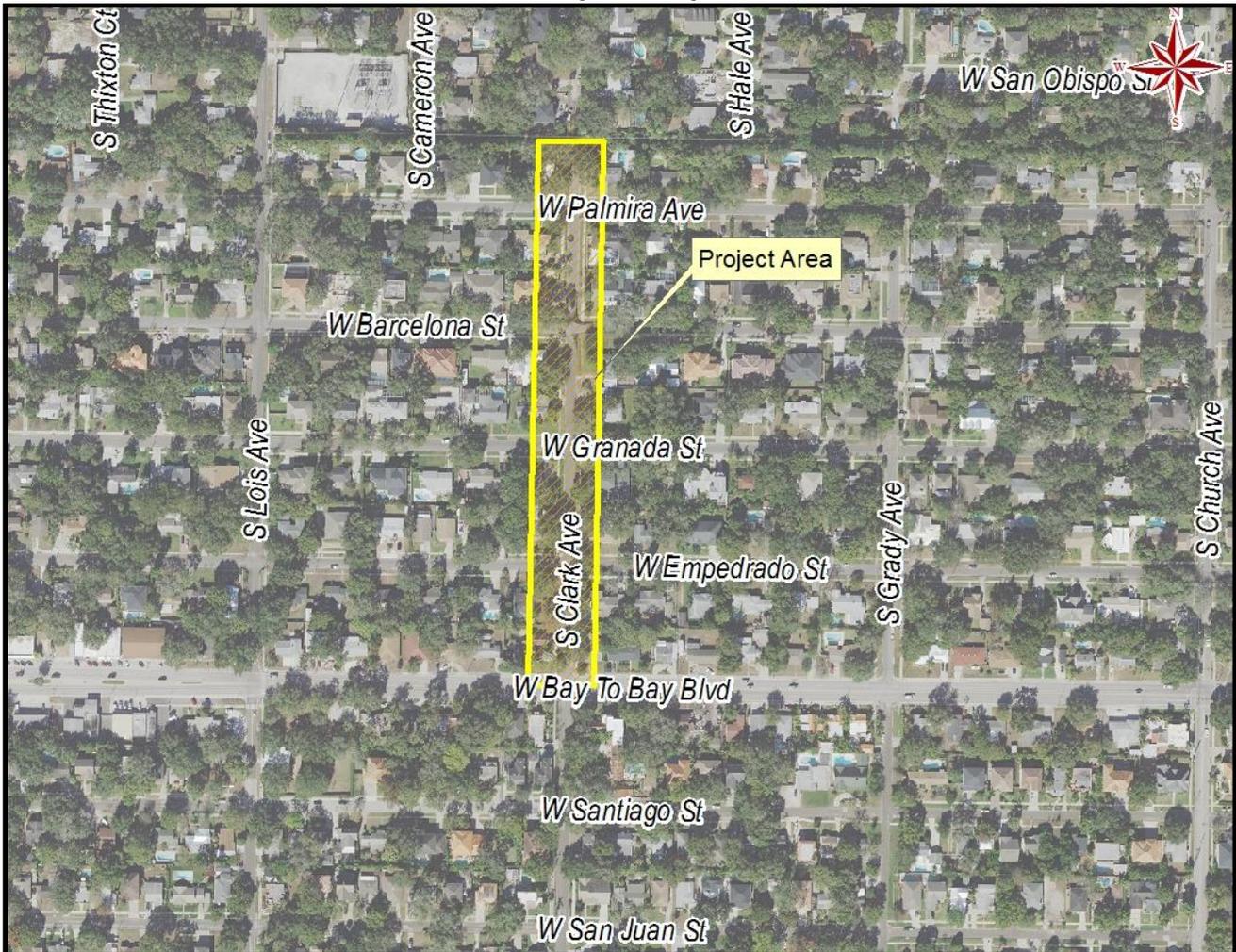
Virginia Park PH3, Clark from Bay to Bay to Palmira

Flooding Relief FY2017, District 4

Estimated cost: \$325K

- **Project Description:**
The project consists of regrading of the roadway to improve drainage.
- **Justification:**
Localized flooding occurs at intersections along S. Clark Ave. The proposed project will alleviate the flooding.

Project Map



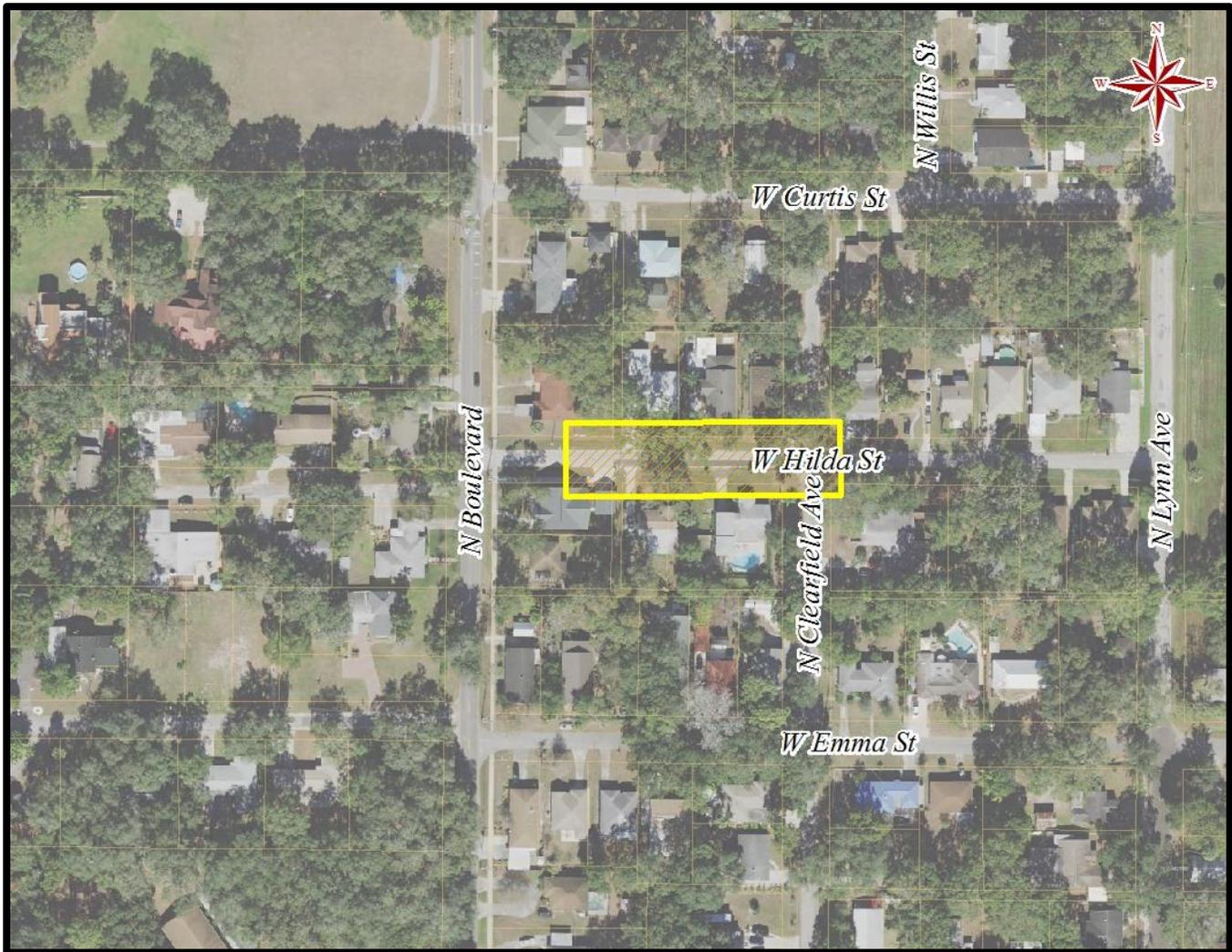
Hilda: North Blvd to Clearfield

FY 2017, District 6

Estimated cost: \$50K

- **Project Description:**
New inlets and pipes will be installed and connected to the existing system on Clearfield Ave.
- **Justification:**
Flooding occurred on W Hilda St. between North Blvd and Clearfield Ave. due to inadequate drainage capacity. The proposed project will alleviate the localized flooding.

Project Map



Seneca Pump Station Site Improvements

FY 2017, District 7

Estimated cost: \$100K

- **Project Description:**

This project will include constructing a new control structure on the existing outflow pipe, stabilizing the pond banks, and controlling erosion caused by runoff flow from adjacent properties.

- **Justification:**

Seneca Pump Station was determined to be obsolete and unnecessary due to reconfigurations of the drainage system serviced by Curiosity Creek Pump Station. Under Phase 1, the pump station building and mechanical equipment were removed. The runoff accumulated in the Seneca pond will flow north to 109th Ave.

Project Map



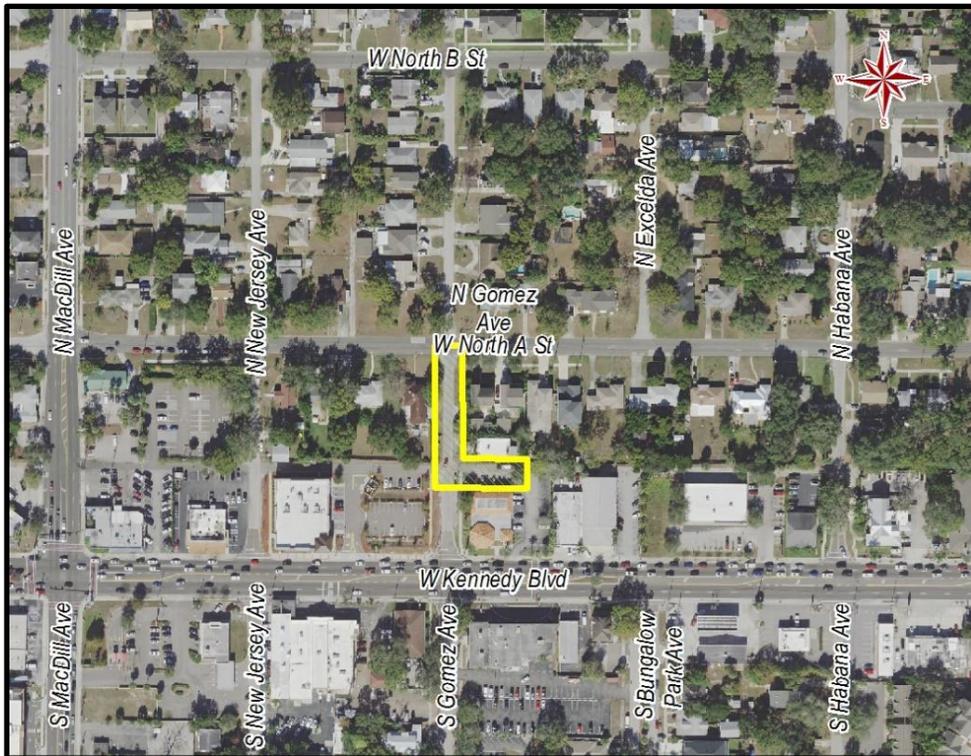
Gomez Alley between Kennedy & North A.

Flooding Relief FY2019, District 4

Estimated cost: \$75K

- **Project Description:**
The project consists of construction of new inlets and pipes connecting to the existing drainage system on W North A Street and regrading of the roadway as needed.
- **Justification:**
Localized flooding occurs in the low lying Gomez alley area. The proposed project will alleviate the flooding.

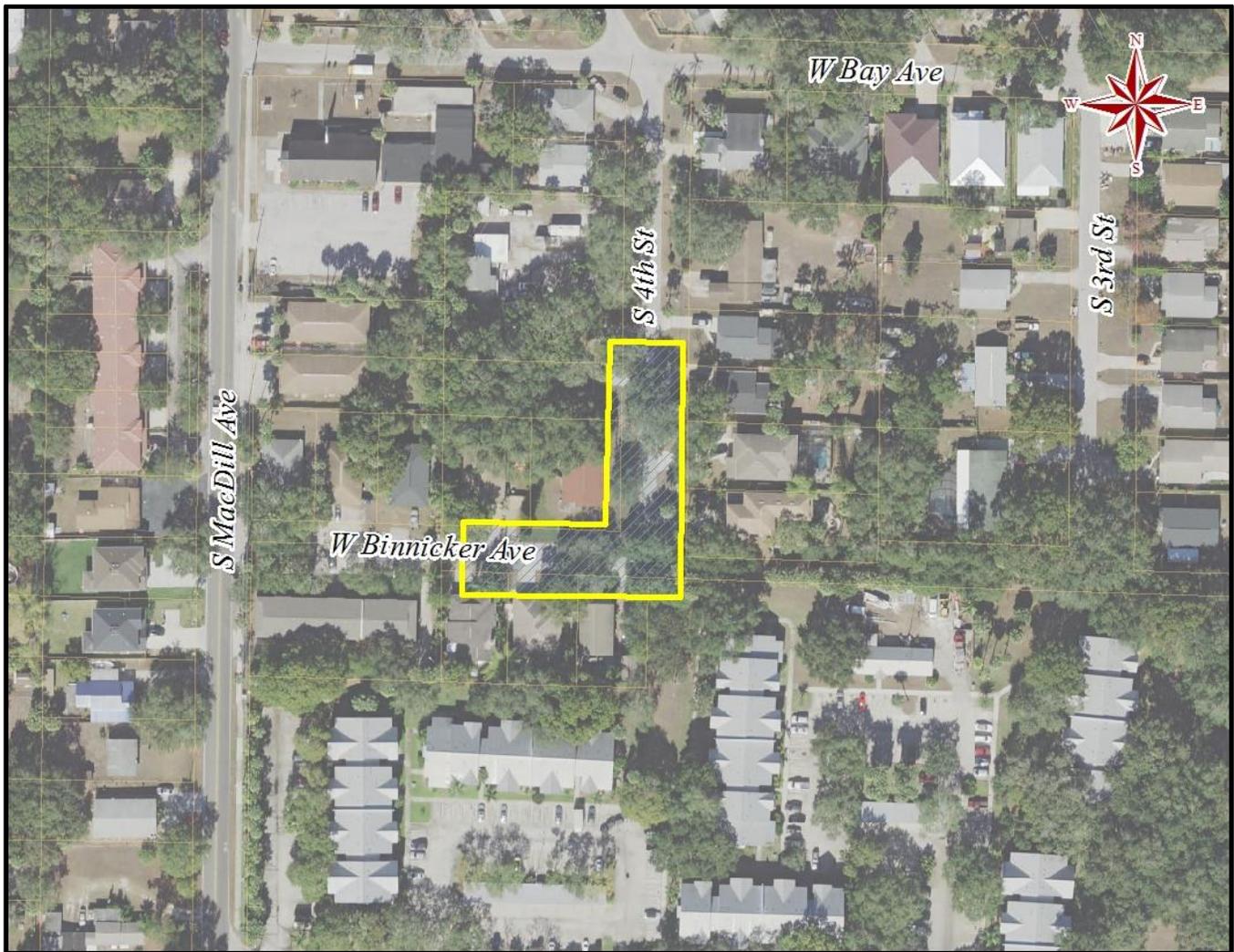
Project Map



Binnicker at 4th St.
Flooding Relief FY2018, District 4
Estimated cost: \$50K

- **Project Description:**
The project consists of construction of new pipes and inlets and regrading of the roadway as needed.
- **Justification:**
Localized flooding occurs at intersection of W Binnicker Ave and S 4th St. The proposed project will alleviate the flooding.

Project Map



Albany: Barclay to Mariana

Flooding Relief FY2018 – CCC, District 7

Estimated cost: \$100K

- **Project Description:**

Evaluating Exfiltration trench option. Construction of approximately 1,100 of new pipe inlets to convey runoff to existing system in Barclay Avenue is option B.

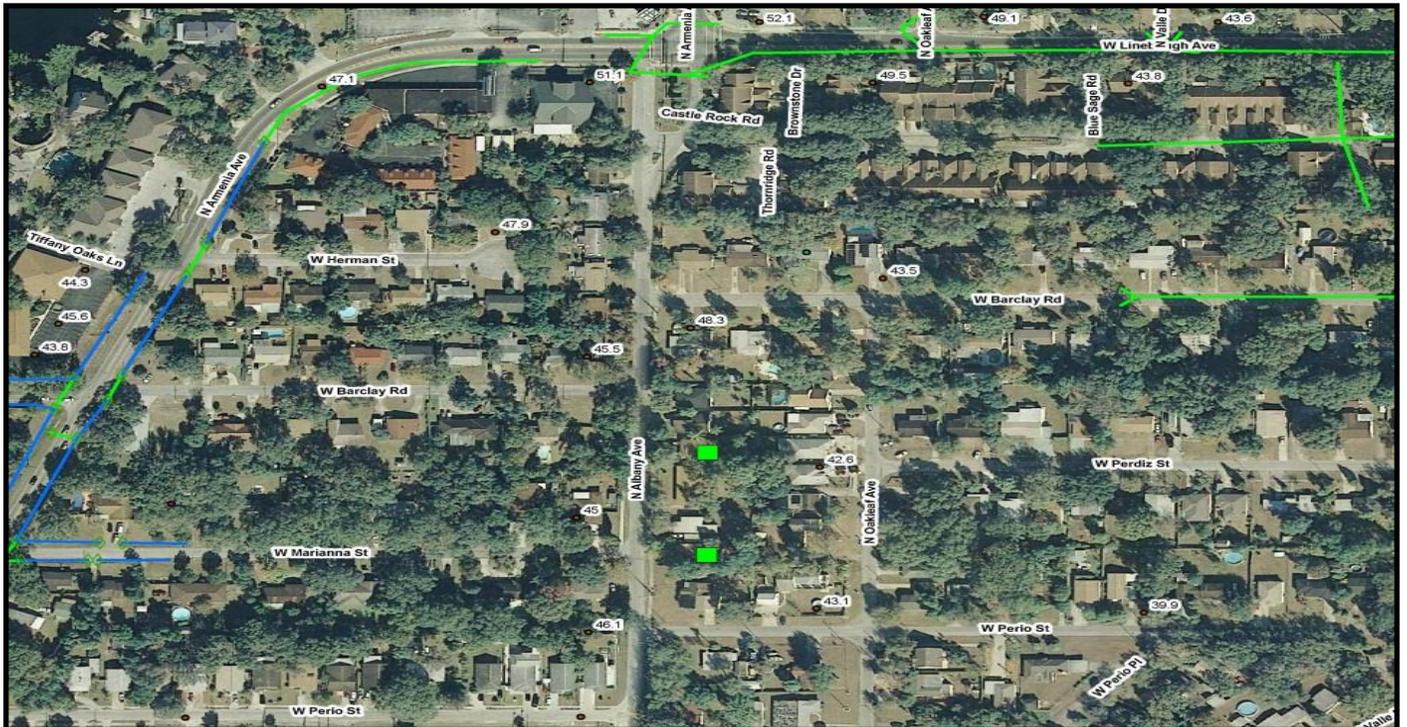
- **Justification:**

Roadway and yard flooding occurs along Albany St at Mariana St. The project will relieve flooding.

- **Related Issues:**

Commitment letter sent for FY 2015.

Project Map



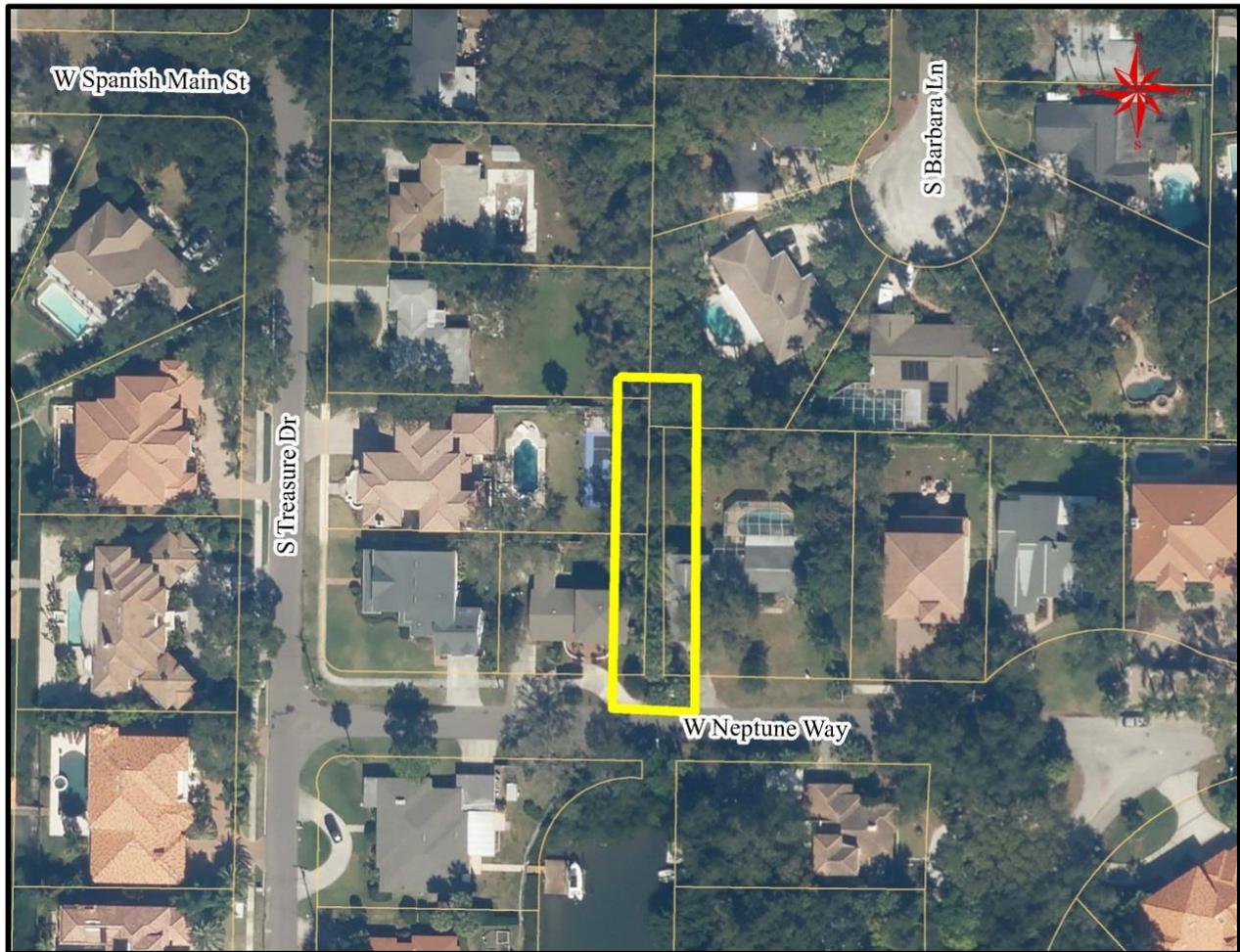
Neptune/Treasure PID

FY2018, District 6

Estimated cost: \$75K

- **Project Description:**
The proposed project will pipe in the existing ditch with a shallow swale.
- **Justification:**
The ditch is eroded and in need of restoration. The proposed project will prevent further erosion and enhance public safety.

Project Map



3911 Swann Ave.

FY2018, District 6

Estimated cost: \$50K

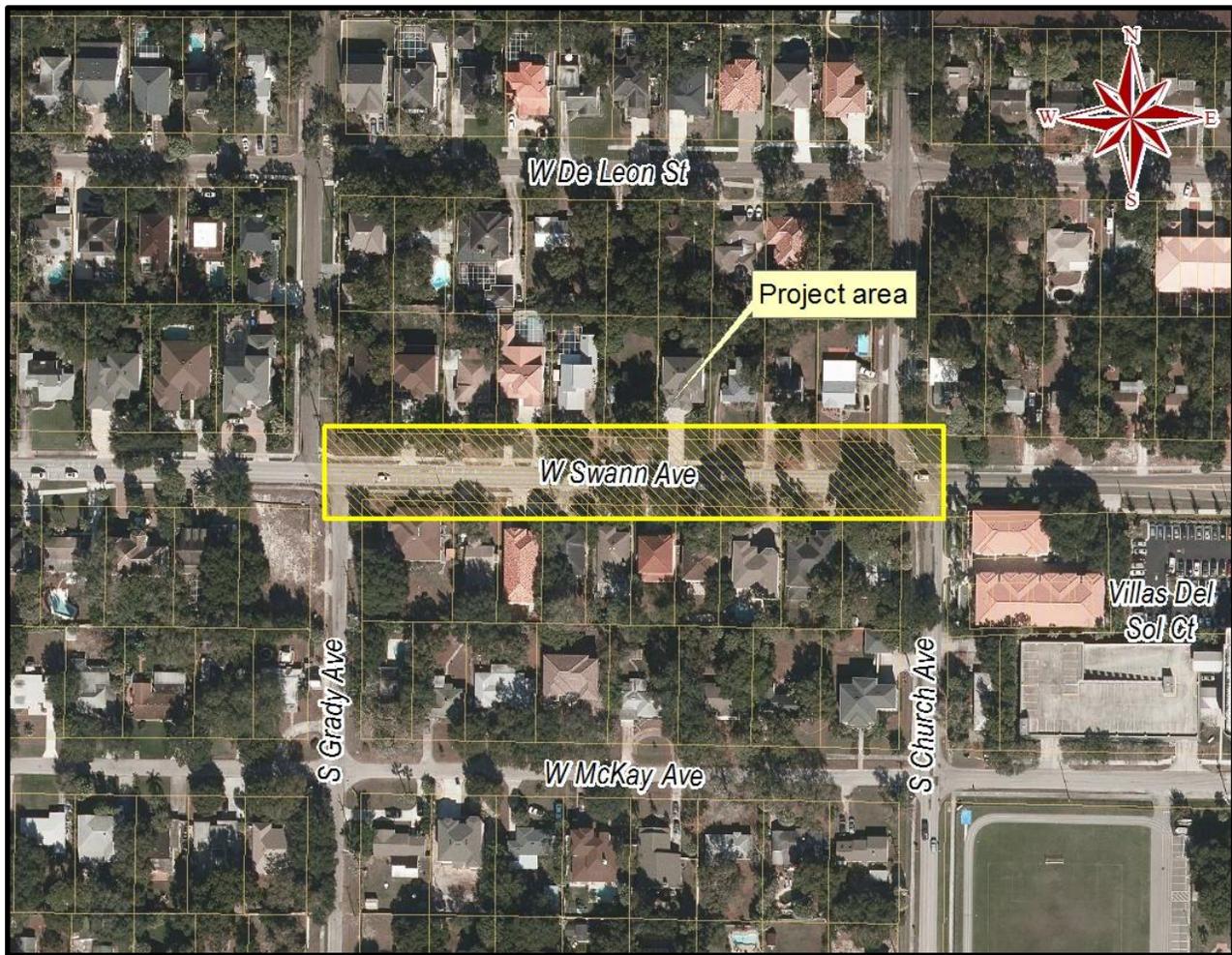
- **Project Description:**

The proposed project consists of converting some existing manholes to inlets.

- **Justification:**

Low lying areas on the street experience street and yard flooding. This project will alleviate the localized flooding.

Project Map



1510 W Park PID

FY2017, District 6

Estimated cost: \$50K

- **Project Description:**

The proposed project will pipe in the existing ditch.

- **Justification:**

The ditch is eroded and had been repaired multiple times in the past. The proposed project will enhance public safety and reduce maintenance cost.

Project Map



Rambla Flooding Relief

FY2018, District 7

Estimated cost: \$100K

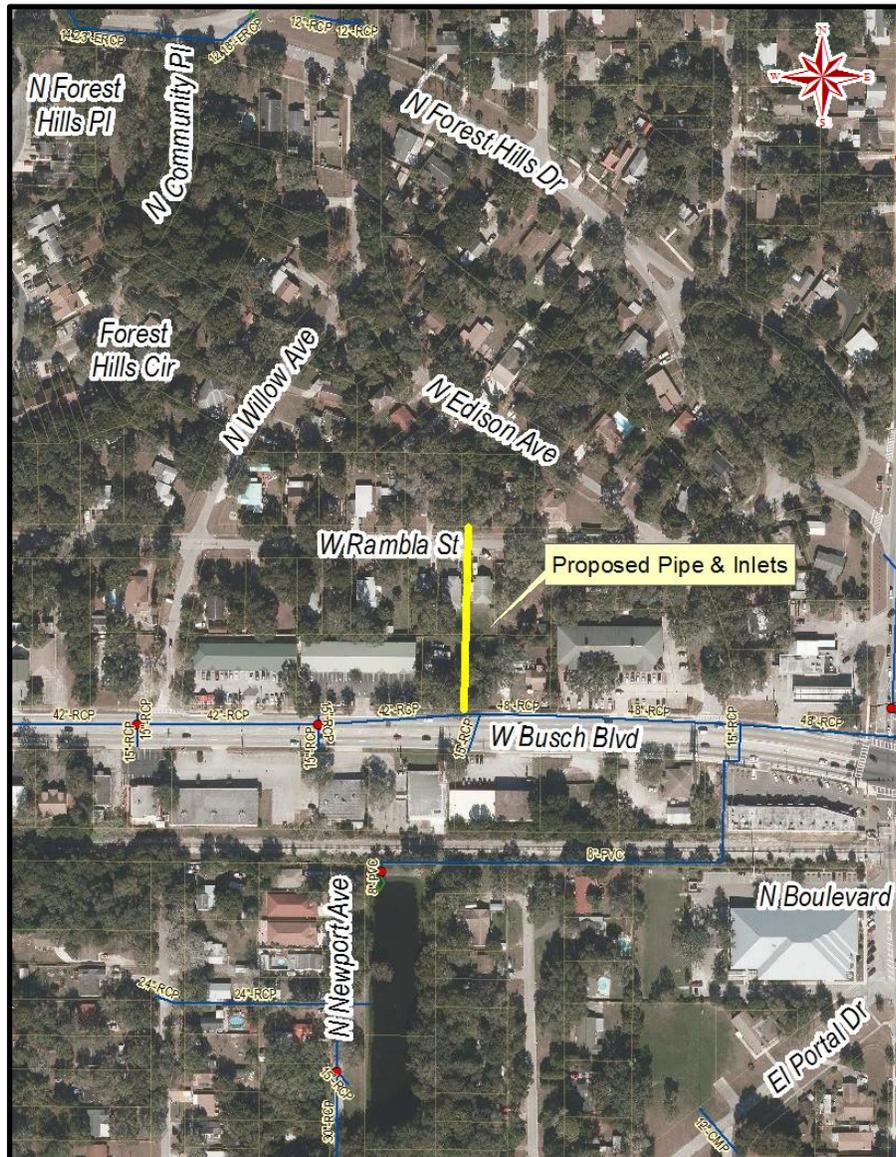
- **Project Description:**

The proposed project will consist of construction of new inlets and pipes connecting to the existing drainage system.

- **Justification:**

Properties on Rambla St. between Edison Ave. and Willow Ave. experience chronic flooding. The project will alleviate the flooding in the area.

Project Map



45th St. North of Hillsborough Flooding Relief

FY2019, District 6

Estimated cost: \$150K

- **Project Description:**

The proposed project will replace the temporary pump with a permanent pump station to alleviate the neighborhood flooding.

- **Justification:**

Currently a temporary pump is utilized to drain the low-lying N 45th St. area north of E Hillsborough Ave. This project will provide a more reliable system to better alleviate the flooding in the area.

Project Map



Paloma Place

Flooding Relief FY2018, District 4

Estimated cost: \$75K

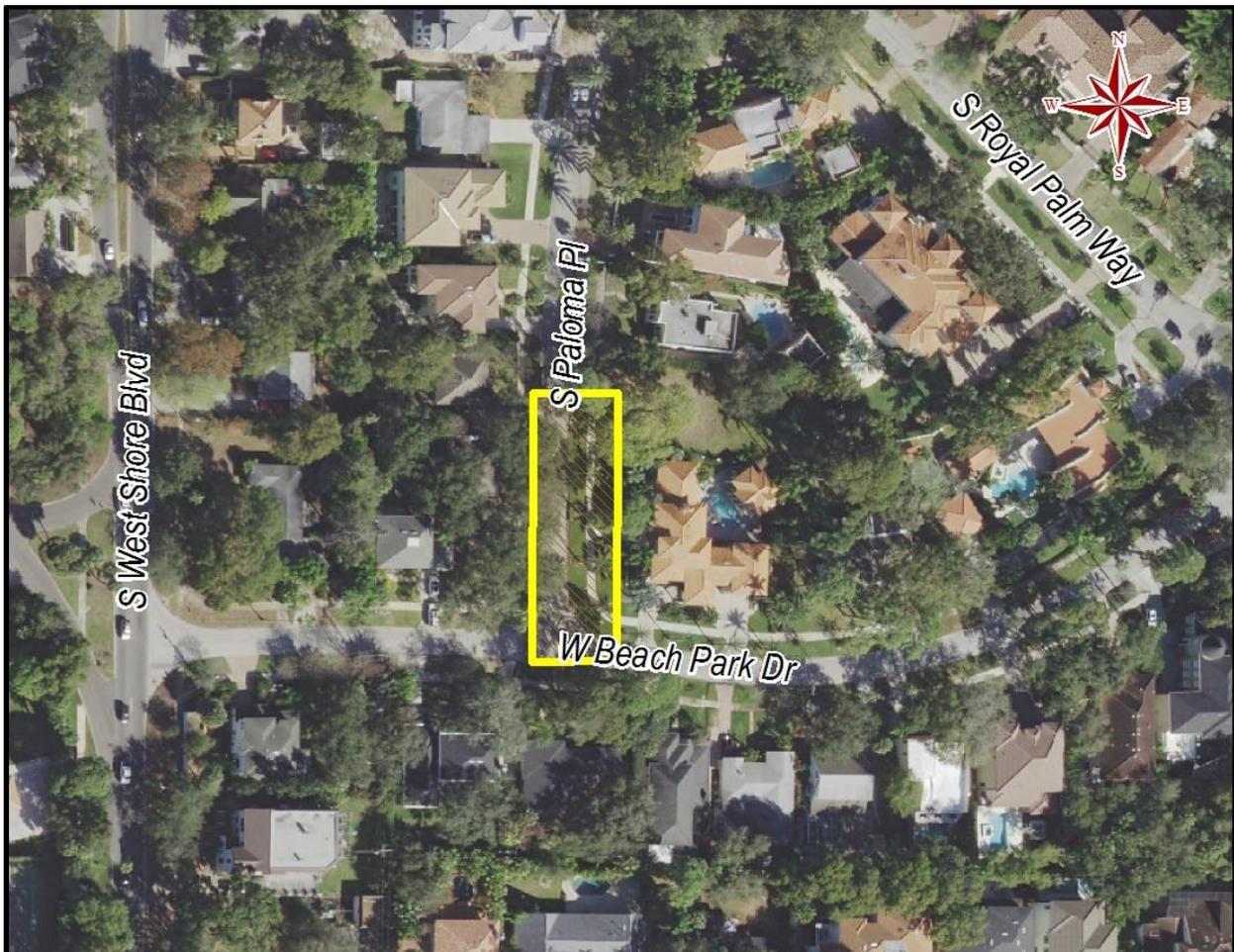
- **Project Description:**

The proposed project consists of replacing the failed pipe and construction of new inlets to alleviate the localized flooding in the area.

- **Justification:**

Flooding occurred in the area due to failed pipe. The proposed project will reduce the localized flooding.

Project Map



Emma St. and Seminole Ave.

Flooding Relief FY2019, District 6

Estimated cost: \$100K

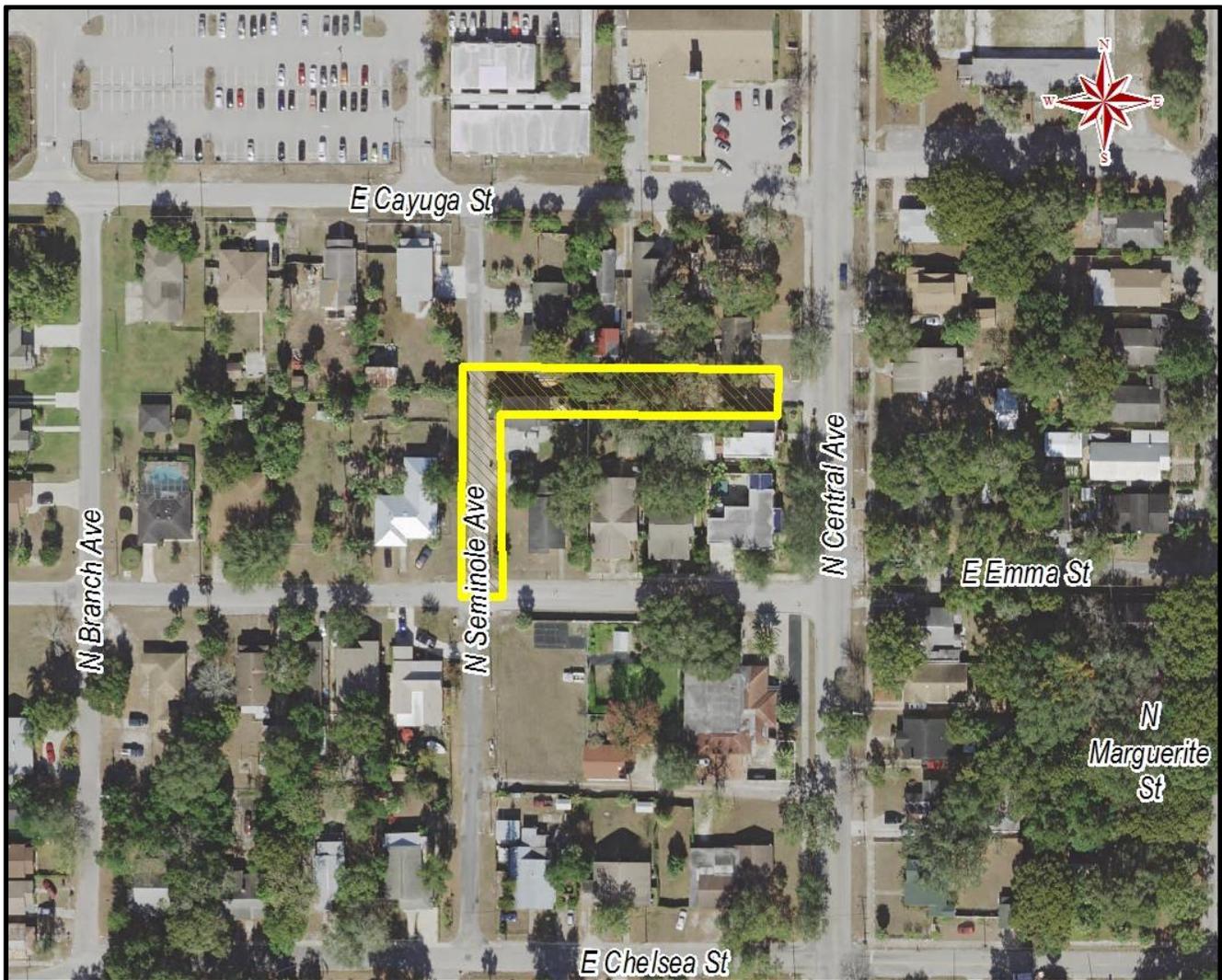
- **Project Description:**

The project consists of construction of new pipes and inlets and regrading of the roadway as needed to alleviate the flooding in the area.

- **Justification:**

The proposed project will reduce the localized flooding.

Project Map



Iowa Ave. – Sheridan to Sherwood

Flooding Relief, FY2018, District 4

Estimated cost: \$75K

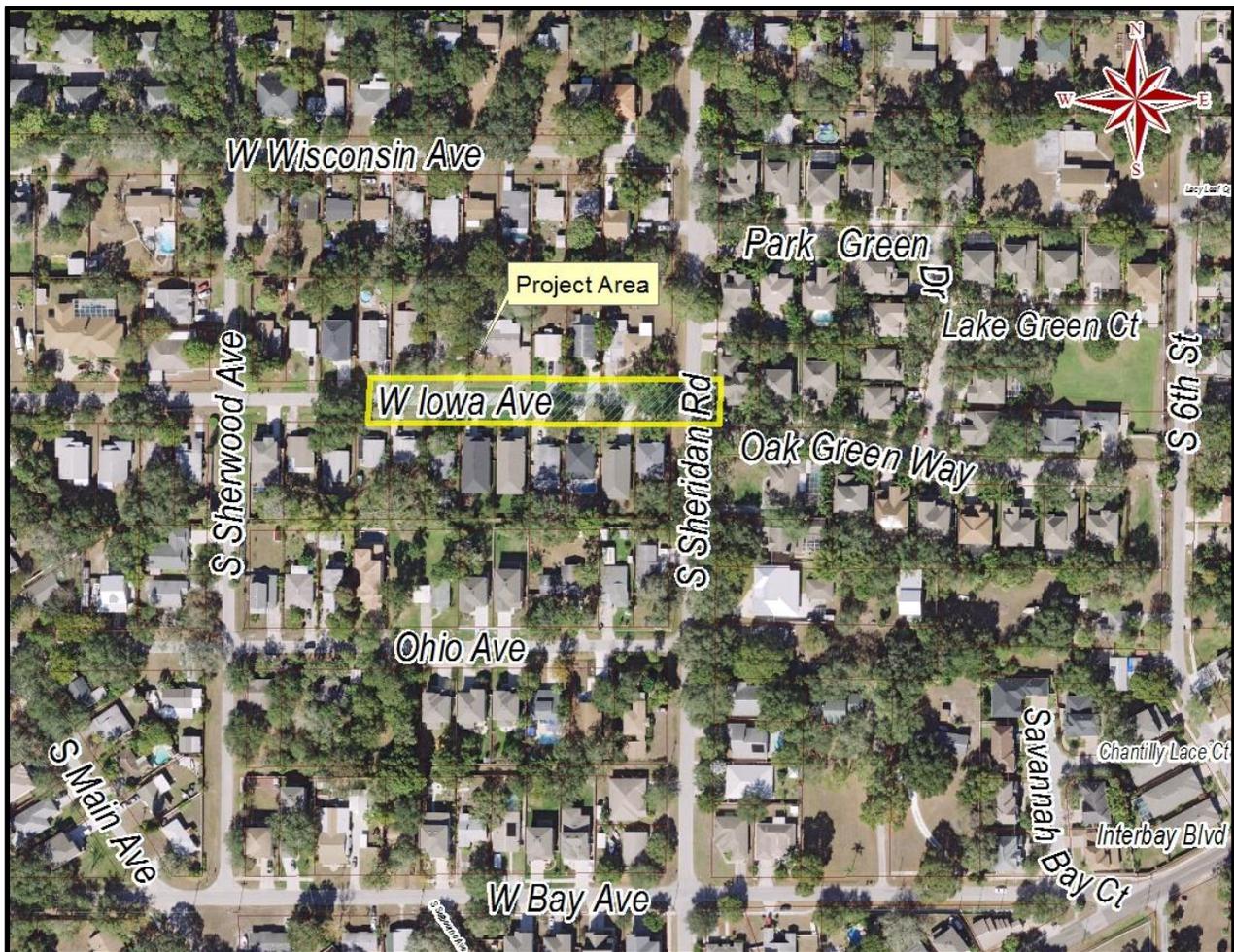
- **Project Description:**

The proposed project will replace/upgrade the system to improve drainage in the area.

- **Justification:**

Development in the vicinity utilizes a system of drainage ditches and pipes to convey runoff. The ditch system has been eroded and some of the pipes and other structures have failed and in need of restoration or replacement.

Project Map



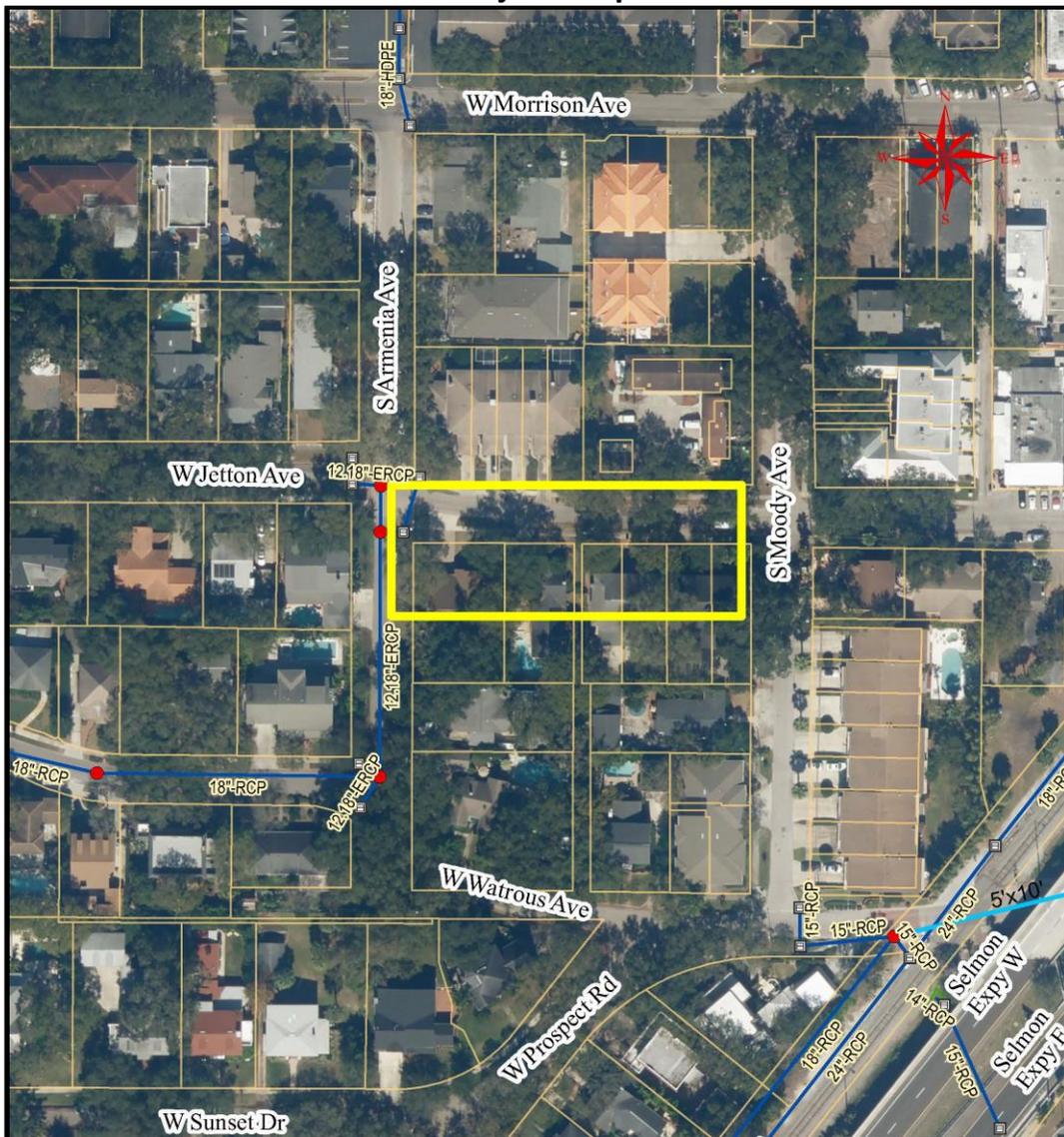
W Jetton Ave. between Armenia & Moody

Flooding Relief FY 2017, District 4

Estimated cost: \$125K

- **Project Description:**
Storm pipe and inlet system will be installed and connected to the existing stormwater system to reduce flooding in the area.
- **Justification:**
Flooding complaint reported from residents on 2400 block Jetton Ave. The proposed project will alleviate the localized flooding.

Project Map



North St. & Packwood Pond

Flooding Relief FY 2019, District 6

Estimated cost: \$100K

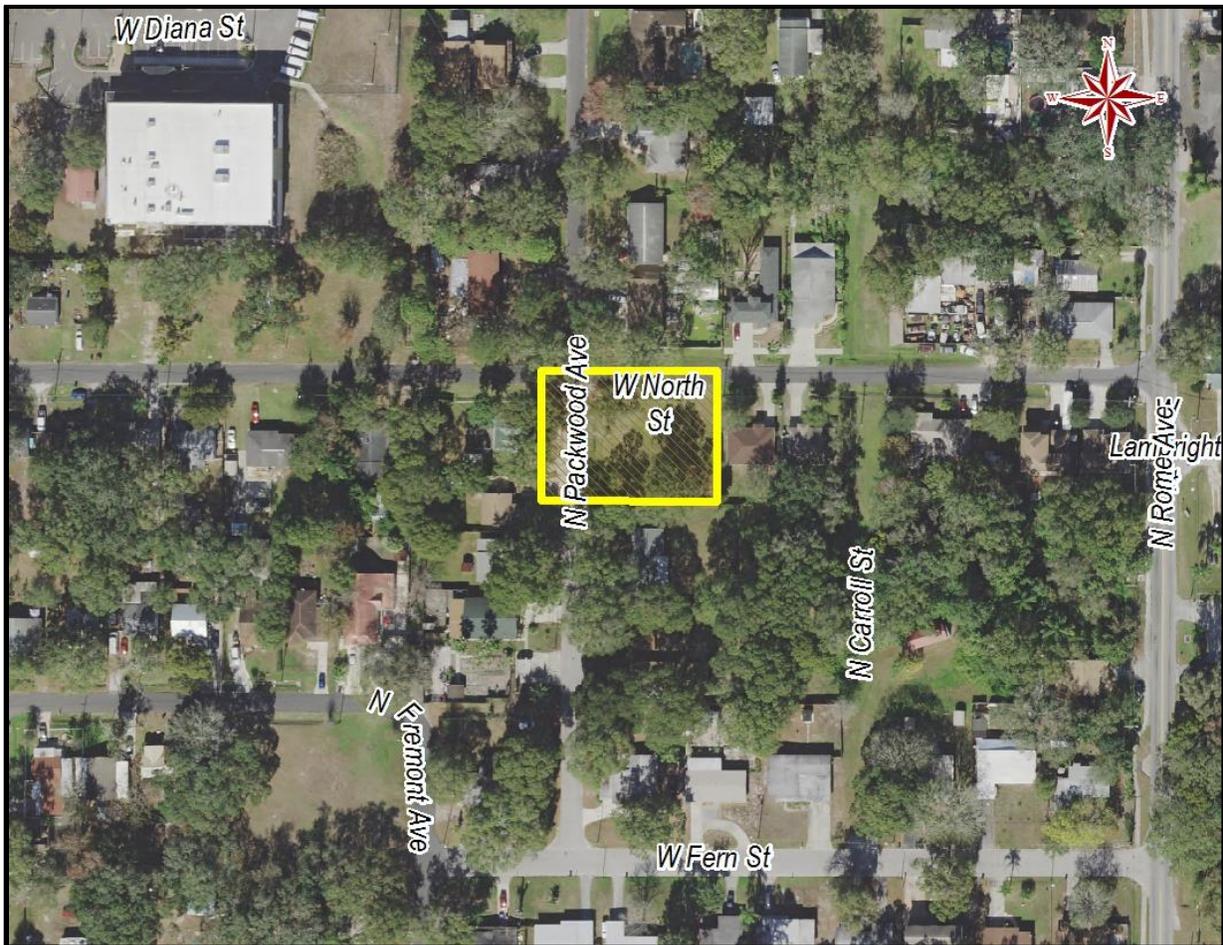
- **Project Description:**

The proposed project consists of construction of a new pond, new pipes and inlets, and regrading of the roadway as needed.

- **Justification:**

Flooding complaints have been reported from the residents in the area. The proposed project will alleviate the localized flooding and provide water quality treatment.

Location Map



Hale Ave at Cleveland St. Flooding Relief

Flooding Relief FY 2020, District 6

Estimated cost: \$100K

- **Project Description:**

The proposed project consists of construction of new pipes and inlets, and regrading of the roadway as needed.

- **Justification:**

South Hale Avenue between West Kennedy Boulevard and West Cleveland Street experiences frequent and dangerous flooding during short, intense rainfalls. The existing stormwater infrastructure on South Hale Avenue is old and undersized. The proposed project will alleviate the current flooding situation and ultimately reduce flood stages.

Location Map



Sherrill St. north of Cleveland St.

Flooding Relief FY 2018, District 6

Estimated cost: \$100K

- **Project Description:**

The proposed project consists of construction of new pipes and inlets.

- **Justification:**

Currently there is a small ditch on the east side of Sherrill St between Kennedy Blvd and Cleveland St that drains to the private pond located on 5119 W Cleveland St. The proposed project will divert the flow to the existing city system rather than to the private pond.

Location Map





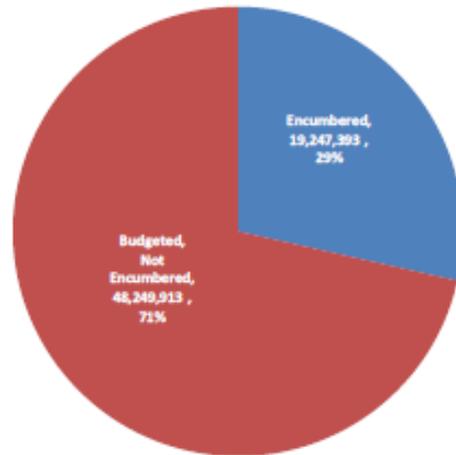
Section B

Stormwater Capital Improvement Bond Program Report

**City of Tampa
Budget Office
Stormwater Assessment Revenue Bonds, Series 2018
As of August 31, 2018**

Available Funding for Projects:

Bond Proceeds	\$97,782,033
Underwriters & Other Fees	(706,444)
Bank Note Refunding	(26,220,000)
Transfer to Capital Project Fund	<u>70,855,589</u>
Amount Expended to Date	(3,358,283)
Accounts Payable	47,471
Unused Fees and Interest Earnings	266,832
Remaining Bond Proceeds	<u>67,811,609</u>
Accounts Payable	47,471
Encumbered	19,247,393
Budgeted, Not Encumbered	<u>48,249,913</u>
Available for Projects ⁽¹⁾	\$266,832



Spend-Down Schedule:

6 Months (10/26/2018)	10%	\$7,085,559
12 Months (04/26/2019)	45%	\$31,885,015
18 Months (10/26/2019)	75%	\$53,141,692
24 Months (04/26/2020)	100%	\$70,855,589
Percentage Spent - August 2018	5%	
Bond Issuance Date	4/26/2018	

Project Details:

Project Name	Project Number	Budget	Actuals	Encumbrance	Balance
43rd Street Outfall Regional Drainage Improv Ph III	1000151	\$4,432,398	\$115,170	\$6,374	\$4,310,854
Cypress Street Outfall Pipeline Extension	1000176	19,775	21	0	19,754
Upper Peninsula Flooding Relief , Ph. II - Vasconia	1000178	3,665,949	319,759	0	3,346,190
Orchid Sink Rehabilitation	1000384	579,008	336,231	174,935	67,842
Watrous Ditch Rehabilitation	1000386	89,867	59,844	188	29,835
Edison Avenue	1000571	108,156	1,290	0	106,866
Kensington Avenue	1000573	39,273	0	0	39,273
30th Street Outfall	1000580	40,000	0	39,757	243
Box Culvert Rehabilitation	1000581	1,013,607	442,507	366,150	204,950
Neptune Lagoon	1000582	129,484	1,001	0	128,483

Project Name	Project Number	Budget	Actuals	Encumbrance	Balance
Howard Avenue Flooding Relief Swann to Jetton	1000749	645,762	5,010	0	640,752
Lower Peninsula Watershed Plan	1000750	1,859,316	45,377	74,731	1,739,208
Ditch Rehabilitation	1000751	1,149,721	15,466	92,844	1,041,411
Southeast Seminole Heights Flood Relief	1000773	11,500,000	0	0	11,500,000
Upper Peninsula Watershed Drainage Imprv	1001017	16,873,600	418,317	16,034,032	421,251
Cypress Street Outfall Regional Stormwater	1001018	14,500,000	321,457	1,852,460	12,326,083
99th Avenue Pumping Station	1001164	925,000	0	0	925,000
6901 Sparkman Flooding Relief	1001165	325,000	0	0	325,000
Hamilton Creek Water Quality Improvements	1001169	500,000	0	0	500,000
Rogers Park Drainage Improvements	1001170	431,442	0	0	431,442
Lamb Canal Rehabilitation	1001171	1,500,000	0	0	1,500,000
North Tampa Closed Basins FY2018 - FY2022	1001173	4,232,906	1,077,607	21,801	3,133,498
Failed Pipe CIPP FY2018 - FY2022	1001175	2,462,031	2,334	412,525	2,047,172
In House Flooding Relief/Failed Pipe Replacement	1001176	124,338	11,254	7,899	105,185
Stormwater Improv Annual Contract FY2018-FY2022	1001177	1,000,056	0	0	1,000,056
Consultants and Land Acquisition FY2018 - FY2022	1001218	1,183,900	92,043	125,747	966,110
In House Flooding Relief - 15th Street at Ellicott Street	1001405	125,000	0	0	125,000
In House Flooding Relief - 45th Street North of Hillsborou	1001406	200,000	0	0	200,000
In House Flooding Relief - Annette Avenue & Bougainvill	1001407	150,000	0	0	150,000
In House Flooding Relief - Emma Street and Seminole Av	1001408	100,000	0	0	100,000
In House Flooding Relief - Fair Oaks and Bayshore	1001409	100,000	0	0	100,000
In House Flooding Relief - North Street & Packwood Pon	1001410	100,000	0	0	100,000
In House Flooding Relief - South Avenue: Grady Avenue t	1001411	150,000	0	0	150,000
In House Flooding Relief - 17th Street and Annona Aven	1001412	150,000	0	0	150,000
In House Flooding Relief - Ballast Point Boulevard at Mac	1001413	125,000	0	0	125,000
In House Flooding Relief - Gomez Alley between Kenned	1001414	100,000	0	0	100,000
In House Flooding Relief - Rambla Street	1001428	100,000	0	37,950	62,050
West Saint Isabel from Gomez to Habana Flooding Relief	1001437	125,000	0	0	125,000
Project 0000000	0000000	0	93,595	0	-93,595
Grand Total		\$70,855,589	\$3,358,283	\$19,247,393	\$48,249,913

⁽¹⁾ Available balance from unused issuance cost budget and interest earnings.



Section C

Stormwater Service Assessment Program Report

Tampa City Council Update No. 8 - October 2018

Maintenance activities are reported based on service level frequency. Below is a list of the primary maintenance categories that are being tracked. Along with service level cycle times, we have also provided maintenance statistics for the quarter.

Operations and Maintenance Activities	Pre Fee Service Levels	Fee Target Service Levels	4 th Quarter FY18 & Year-to-Date Service Levels
Ditches	10-Year Cycle	7-Year Cycle	10.3-Year Cycle (4 th Qtr.) 6.2-Year Cycle (Y.T.D)
Ponds	Minimal	3-Year Cycle	3-Year Cycle (4 th Qtr.) 3-Year Cycle (Y.T.D)
Pipes	10-Year Cycle	7-Year Cycle	5.1-Year Cycle (4 th Qtr.) 3.6-Year Cycle (Y.T.D)
Outfalls	15-Year Cycle	5-Year Cycle	37-Year Cycle (4 th Qtr.) 13-Year Cycle (Y.T.D)
Pumps	Low Preventative Maintenance	Annual Preventative Maintenance	1-Year Cycle
Street Sweeping	90-Day Cycle	60-Day Cycle	63-Day Cycle (4 th Qtr.) 61-Day Cycle (Y.T.D)
Operations and Maintenance Activities	4 th Quarter Maintenance Statistics		
Ditches	24,114 linear feet of ditches maintained with 3,732 tons removed, 441,765 linear feet of ditch mowed monthly. Ditch work slowed due to wet sod fields not being able to provide restoration sod.		
Ponds	3.79 tons of trash and illegal dumping have been disposed of, there have been 62 herbicide treatments to various ponds, 3 pond harvesting activities were conducted, 123 stormwater ponds mowed monthly.		
Pipes	135,110 linear feet of storm drain pipe inspected and maintained, 1,705 storm drain inlets and manholes inspected and maintained with 320 tons of debris removed. 75 linear feet of box culvert cleaned with 149 tons removed. 53 cave-ins repaired.		
Outfalls	3 outfalls maintained. Summer outfall maintenance was influenced by rains and high tides. Also, at end of the fiscal year, financial resources were spent down. Fall and winter activities will increase significantly.		
Pumps	Preventative Maintenance provided to all thirteen (13) stormwater pump stations. Continuous monitoring is ongoing with proactive maintenance and inspections.		
Street Sweeping	5,464 curb miles were swept, approximately 1,201 tons of debris removed. Cycle times have improved this quarter due to training and personnel adjustments.		

N. 37th St at E. 3rd Ave.

Before



After



Wisconsin Avenue Spillway

Before



After



Roadside Washout Caused by Stormwater Runoff

Before



After

